



# North Dakota Department of Transportation

Grant Levi, P.E.  
Director

Jack Dalrymple  
Governor

October 6, 2016

## ADDENDUM 3 – JOB 7

TO: All prospective bidders on project SU-3-982(031)035, NHU-3-019(044)155 & NHU-3-020(074)103, Job No. 7 scheduled for the October 14, 2016 bid opening.

The following plan and request for proposal revisions shall be made:

Plan Revisions:

**See attached summary from Chad Petersen, PE, KLJ, dated October 6, 2016 for an explanation.**

Request for Proposal Revisions:

**Remove and replace pages 8-19 of 20 of the Proposal pages located at the beginning of the Request for Proposal, with the enclosed pages revised 10/6/2016.**

Page 8 of 20:

Item 253 0101 STRAW MULCH; 6.95 ACRE was deleted.

Item 253 0201 HYDRAULIC MULCH; quantity increased from 10.27 to 17.22 ACRE.

Page 13 of 20:

Item 752 0600 FENCE CHAIN LINK; quantity decreased from 2400 to 2180 LF.

Page 8-18 of 20:

Items shifted due to deleted item.

Page 19 of 20:

Time for Completion was revised.

**Remove and Replace Special Provision SP 321(14) 2017 CONSTRUCTION REQUIREMENTS with the enclosed Revised 10/05/16 SP 321(14) CONSTRUCTION REQUIREMENTS.**

**Remove and Replace Special Provision SP 373(14) WORK ZONE CAMERA SYSTEM with the enclosed Revised 10/6/16 SP 373(14) WORK ZONE CAMERA SYSTEM.**

**Add Special Provision SP 385(14) CONDITIONS OF CONTRACT AWARD**

**Add Special Provision SP 389(14) MASS CONCRETE**

**Add Special Provision SP 390(14) BRIDGE DISC BEARINGS**

**Add Special Provision SP 391(14) RAILROAD EASEMENT REQUIREMENTS**

Addendum 3

Job 7, October 14, 2016 Bid Opening

Page 2 of 2

This addendum is to be incorporated into the bidder's proposal for this project. AASHTOWare Project Bids files should be updated by downloading the addendum file from the Bid Express on-line bidding exchange at <http://www.bidx.com/> and load it into the AASHTOWare Project Bids program.

A handwritten signature in black ink, appearing to read "Cal J. Gendreau". The signature is written in a cursive style with a large initial "C".

CAL J. GENDREAU – CONSTRUCTION SERVICES ENGINEER

80:plm

Enclosure



◇ October 6, 2016

ADDENDUM 3 JOB 7

TO: All prospective bidders and suppliers on Project NHU-3-019(044)155, NHU-3-020(074)103 & SU-3-982(031)035 scheduled for the October 14, 2016 bid opening.

Revisions for NHU-3-019(044)155, NHU-3-020(074)103 & SU-3-982(031)035:

**Remove & replace plan sheets:**

- Section 2 Sheet 1 Revised 10/6/2016
- Section 6 Sheet 2 Revised 10/4/2016
- Section 6 Sheet 4 Revised 10/6/2016
- Section 8 Sheets 1, 3 Revised 10/5/2016
- Section 76 Sheets 8-9 Revised 10/5/2016
- Section 80 Sheet 1 Revised 10/5/2016
- Section 170 Sheet 25 Revised 10/5/2016

with the enclosed revised sheets.

Electronic files will be made available through the NDDOT's Plans and Proposals Page.

SECTION 2

*SHEET 1:*

- SP 321(14) has been renamed "Construction Requirements".
- SP 373(14) has been renamed "Work Zone Camera System".
- Added SP 385(14) Conditions of Contract Award.
- Added SP 389(14) Mass Concrete.
- Added SP 390(14) Bridge Disc Bearings.
- Added SP 391(14) Railroad Easement Requirements.

SECTION 6

*SHEET 2:*

- Note 253-P01: HYDRAULIC MULCH has been added.

*SHEET 4:*

- Note 704-P03: TRAFFIC CONTROL PHASING has been revised.
- Note 722-P01: MANHOLE SANITARY has been revised.
- Note 722-P02: MANHOLE CASTINGS has been revised.

SECTION 8

*SHEET 1:*

- The following bid items have been updated:

Spec	Code	Description	Unit	Previous Quantity	Addendum 3 Quantity
253	0201	HYDRAULIC MULCH	ACRE	10.27	17.22

- The following bid items have been removed:

Spec	Code	Description	Unit	Previous Quantity	Addendum 3 Quantity
253	0101	STRAW MULCH	ACRE	6.95	-

**SHEET 3:**

- The following bid items have been updated:

Spec	Code	Description	Unit	Previous Quantity	Addendum 3 Quantity
752	0600	FENCE CHAIN LINK	LF	2,400	2,180

**SECTION 76**

**SHEET 8:**

- Straw Mulch bid item and calls have been changed to Hydraulic Mulch.

**SHEET 9:**

- Straw Mulch bid item and calls have been changed to Hydraulic Mulch.

**SECTION 80**

**SHEET 1:**

- Updated quantity of "Fence Chain Link".

**SECTION 170**

**SHEET 25:**

- Added SP 389(14) Mass Concrete.
- Added SP 390(14) Bridge Disc Bearings.

**SPECIAL PROVISIONS**

**SP 321(14):**

- Special provision has been changed from "2017 Construction Requirements" to "Construction Requirements".
- SP 321(14) has been updated.

**SP 373(14):**

- SP 373(14) has been updated.

**SP 385(14):**

- Added SP 385(14) Conditions of Contract Award.

**SP 389(14):**

- Added SP 389(14) Mass Concrete.



*SP 390(14):*

- Added SP 390(14) Bridge Disc Bearings.

*SP 391(14):*

- Added SP 391(14) Railroad Easement Requirements.

This addendum is to be incorporated into bidder's proposal for this project.

Sincerely,  
KLJ

*Chad Petersen*

Project Engineer

Enclosure(s): Revised Plan Sheets

-Project #: NHU-3-019(044)155, NHU-3-020(074)103 & SU-3-982(031)035

c: Ardin Striefel, NDDOT

BID ITEMS

Projects: SU-3-982(031)035 (PCN-21609), NHU-3-019(044)155 (PCN-17505), and NHU-3-020(074)103 (PCN-17504)

**Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$\$	000	\$\$\$\$\$	00
017	203	0140	BORROW-EXCAVATION	CY	3,580.				
018	210	0102	CLASS 1 EXCAVATION-SITE 1	L SUM	1.				
019	210	0103	CLASS 1 EXCAVATION-SITE 2	L SUM	1.				
020	210	0201	FOUNDATION PREPARATION	EA	2.				
021	210	0209	FOUNDATION FILL	TON	20,908.				
022	210	0210	FOUNDATION FILL	CY	84.300				
023	216	0100	WATER	M GAL	1,027.				
024	251	0100	SEEDING CLASS I	ACRE	10.270				
025	251	2000	TEMPORARY COVER CROP	ACRE	6.950				
026	253	0201	HYDRAULIC MULCH	ACRE	17.220				
027	255	0101	ECB TYPE 1	SY	4,230.				
028	255	0151	REMOVE ECB TYPE 1	SY	4,230.				
029	258	0100	CONCRETE SLOPE PROTECTION	SY	421.				
030	261	0112	FIBER ROLLS 12IN	LF	6,836.				
031	261	0113	REMOVE FIBER ROLLS 12IN	LF	6,836.				
032	302	0120	AGGREGATE BASE COURSE CL 5	TON	7,765.				

BID ITEMS

Projects: SU-3-982(031)035 (PCN-21609), NHU-3-019(044)155 (PCN-17505), and NHU-3-020(074)103 (PCN-17504)

**Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
033	302	0314	TEMPORARY TRAFFIC SURFACE AGGREGATE	TON	1,328.				
034	411	0105	MILLING PAVEMENT SURFACE	SY	17,840.				
035	430	0500	COMMERCIAL GRADE HOT MIX ASPHALT	TON	3,033.				
036	550	0302	8.5IN NON-REINF CONCRETE PVMT CL AE-DOWELED	SY	10,378.				
037	602	0130	CLASS AAE-3 CONCRETE	CY	2,313.500				
038	602	1134	PILE SUPPORTED APPROACH SLAB	SY	115.600				
039	602	6001	PRECAST PIER CAP	EA	8.				
040	602	6002	PRECAST ABUTMENT	EA	4.				
041	602	6005	PRECAST CONCRET WING WALL	EA	4.				
042	604	9550	PRESTRESSED CONCRETE FASCIA GIRDER	LF	360.				
043	612	0115	REINFORCING STEEL-GRADE 60	LBS	409,054.				
044	612	0116	REINFORCING STEEL-GRADE 60-EPOXY COATED	LBS	40,782.				
045	616	5890	STRUCTURAL STEEL	L SUM	1.				
046	618	0115	UNTREATED TIMBER	MBM	51.700				
047	622	0068	STEEL PILING HP 14 X 89	LF	12,880.				
048	624	0123	PEDESTRIAN RAILING	LF	1,237.400				

BID ITEMS

Projects: SU-3-982(031)035 (PCN-21609), NHU-3-019(044)155 (PCN-17505), and NHU-3-020(074)103 (PCN-17504)

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$\$	000	\$\$\$\$\$	00
049	624	0124	PEDESTRIAN FENCE	LF	351.				
050	702	0100	MOBILIZATION	L SUM	1.				
051	704	0100	FLAGGING	MHR	2,600.				
052	704	1000	TRAFFIC CONTROL SIGNS	UNIT	5,838.				
053	704	1018	LANE CLOSURE-SIGNAL CONTROL/FLAGGING CONTROL	EA	2.				
054	704	1052	TYPE III BARRICADE	EA	43.				
055	704	1060	DELINEATOR DRUMS	EA	124.				
056	704	1067	TUBULAR MARKERS	EA	159.				
057	704	1086	SEQUENCING ARROW PANEL-TYPE B	EA	3.				
058	704	1500	OBLITERATION OF PAVEMENT MARKING	SF	5,484.				
059	704	3501	PORTABLE PRECAST CONCRETE MED BARRIER	LF	40.				
060	704	3510	PRECAST CONCRETE MED BARRIER-STATE FURNISHED	EA	62.				
061	704	9100	VIDEO MONITORING SYSTEM	EA	1.				
062	706	0500	AGGREGATE LABORATORY	EA	1.				
063	708	1200	SMALL ROCK COVER	TON	620.				
064	708	1531	INLET PROTECTION-FIBER ROLL 12IN	EA	7.				

BID ITEMS

Projects: SU-3-982(031)035 (PCN-21609), NHU-3-019(044)155 (PCN-17505), and NHU-3-020(074)103 (PCN-17504)

**Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
065	708	1533	REMOVAL INLET PROTECTION-FIBER ROLL 12IN	EA	7.				
066	708	1540	INLET PROTECTION-SPECIAL	EA	47.				
067	708	1541	REMOVE INLET PROTECTION-SPECIAL	EA	47.				
068	709	0100	GEOSYNTHETIC MATERIAL TYPE G	SY	13,010.				
069	709	0161	GEOSYNTHETIC MATERIAL TYPE S1	SY	104.				
070	714	4115	PIPE CONDUIT 36IN	LF	64.				
071	714	4120	PIPE CONDUIT 42IN	LF	44.				
072	714	9680	PLUG PIPE-ALL TYPES & SIZES	EA	3.				
073	714	9696	EDGEDRAIN NON PERMEABLE BASE	LF	3,612.				
074	714	9705	UNDERDRAIN CLEANOUT RISER	EA	4.				
075	714	9730	UNDERDRAIN PIPE PVC PERFORATED 6IN	LF	400.				
076	722	0100	MANHOLE 48IN	EA	1.				
077	722	0110	MANHOLE 60IN	EA	5.				
078	722	0120	MANHOLE 72IN	EA	2.				
079	722	0130	MANHOLE 84IN	EA	4.				
080	722	0140	MANHOLE 96IN	EA	1.				

BID ITEMS

Projects: SU-3-982(031)035 (PCN-21609), NHU-3-019(044)155 (PCN-17505), and NHU-3-020(074)103 (PCN-17504)

**Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
081	722	0300	MANHOLE SANITARY	EA	1.				
082	722	1100	MANHOLE RISER 48IN	LF	11.900				
083	722	1110	MANHOLE RISER 60IN	LF	41.900				
084	722	1120	MANHOLE RISER 72IN	LF	12.200				
085	722	1130	MANHOLE RISER 84IN	LF	33.800				
086	722	1140	MANHOLE RISER 96IN	LF	7.100				
087	722	3410	MANHOLE REPAIR	EA	4.				
088	722	3510	INLET-TYPE 2	EA	24.				
089	722	3520	INLET-TYPE 2 DOUBLE	EA	4.				
090	722	3760	INLET SPECIAL-TYPE 1 60IN	EA	1.				
091	722	3910	INLET SLOTTED DRAIN 15IN	LF	10.				
092	722	3920	INLET SLOTTED DRAIN 18IN	LF	180.				
093	722	4020	INLET CATCH BASIN 9IN BEEHIVE	EA	2.				
094	722	6140	ADJUST GATE VALVE BOX	EA	13.				
095	722	6200	ADJUST MANHOLE	EA	20.				
096	722	6240	ADJUST UTILITY APPURTENANCE	EA	3.				

BID ITEMS

Projects: SU-3-982(031)035 (PCN-21609), NHU-3-019(044)155 (PCN-17505), and NHU-3-020(074)103 (PCN-17504)

**Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
097	724	0420	HYDRANT-RELOCATE	EA	1.				
098	724	0611	WATER SERVICE LINE 1IN	LF	45.				
099	724	0892	RELOCATE WATERMAIN	EA	1.				
100	724	2120	36IN X 23IN ARCH SANITARY SEWER PIPE	LF	155.				
101	744	0100	POLYSTYRENE INSULATION BOARD	BD FT	10,422.				
102	748	0140	CURB & GUTTER-TYPE I	LF	3,912.				
103	748	0520	CURB-TYPE I	LF	155.				
104	750	0030	PIGMENTED IMPRINTED CONCRETE	SY	306.				
105	750	0100	SIDEWALK CONCRETE	SY	4,078.				
106	750	1000	DRIVEWAY CONCRETE	SY	88.				
107	750	1020	DRIVEWAY CONCRETE 8IN	SY	269.				
108	750	2115	DETECTABLE WARNING PANELS	SF	288.				
109	752	0600	FENCE CHAIN LINK	LF	2,180.				
110	752	0911	TEMPORARY SAFETY FENCE	LF	70.				
111	752	0922	FENCE REMOVE & RESET	LF	1,750.				
112	754	0110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	68.300				

BID ITEMS

Projects: SU-3-982(031)035 (PCN-21609), NHU-3-019(044)155 (PCN-17505), and NHU-3-020(074)103 (PCN-17504)

**Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
113	754	0112	FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	SF	272.600				
114	754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	390.800				
115	754	0592	RESET SIGN PANEL	EA	5.				
116	754	0593	RESET SIGN SUPPORT	EA	3.				
117	762	0103	PVMT MK PAINTED-MESSAGE	SF	161.				
118	762	0122	PREFORMED PATTERNED PVMT MK-MESSAGE(GROOVED)	SF	4,219.				
119	762	0420	SHORT TERM 4IN LINE-TYPE R	LF	30,638.				
120	762	0422	SHORT TERM 6IN LINE-TYPE R	LF	96.				
121	762	0424	SHORT TERM 8IN LINE-TYPE R	LF	546.				
122	762	0430	SHORT TERM 4IN LINE-TYPE NR	LF	9,790.				
123	762	0434	SHORT TERM 8IN LINE-TYPE NR	LF	768.				
124	762	0436	SHORT TERM 24IN LINE-TYPE NR	LF	84.				
125	762	0440	SHORT TERM MESSAGE-TYPE R	SF	68.				
126	762	0442	SHORT TERM MESSAGE-TYPE NR	SF	2,149.				
127	762	1104	PVMT MK PAINTED 4IN LINE	LF	682.				
128	762	1108	PVMT MK PAINTED 8IN LINE	LF	286.				

BID ITEMS

Projects: SU-3-982(031)035 (PCN-21609), NHU-3-019(044)155 (PCN-17505), and NHU-3-020(074)103 (PCN-17504)

**Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$\$	000	\$\$\$\$\$	00
129	762	1305	PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED	LF	14,765.				
130	762	1307	PREFORMED PATTERNED PVMT MK 6IN LINE-GROOVED	LF	314.				
131	762	1309	PREFORMED PATTERNED PVMT MK 8IN LINE-GROOVED	LF	1,673.				
132	762	1325	PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED	LF	403.				
133	770	0001	LIGHTING SYSTEM	EA	1.				
134	772	9200	IT SYSTEM	EA	1.				
135	772	9811	TRAFFIC SIGNAL SYSTEM - SITE 1	EA	1.				
136	772	9812	TRAFFIC SIGNAL SYSTEM - SITE 2	EA	1.				
137	930	3040	BEARINGS (EXPANSION)	EA	51.				
138	930	3042	BEARINGS (FIXED)	EA	3.				
139	930	7013	ROADWAY CANOPY-SITE 1	L SUM	1.				
140	930	7014	ROADWAY CANOPY-SITE 2	L SUM	1.				
141	930	8600	ELASTOMERIC BEARING PAD	SF	97.800				
142	930	9537	ABUTMENT UNDERDRAIN SYSTEM	EA	2.				
143	930	9952	PIER MEDALLION	EA	4.				
144	970	1000	TREES	EA	14.				

BID ITEMS

Projects: SU-3-982(031)035 (PCN-21609), NHU-3-019(044)155 (PCN-17505), and NHU-3-020(074)103 (PCN-17504)

**Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$\$	000	\$\$\$\$\$	00
145	980	0510	RAILROAD SUB-BALLAST	TON	9,353.				
146	990	0220	GUARD POST-PERMANENT	EA	10.				
147	990	0230	TEMPORARY ACCESS	L SUM	1.				
			SUBTOTAL						
<b>OPTION 1</b>									
148	714	4097	PIPE CONDUIT 15IN-STORM DRAIN	LF	767.				
149	714	4101	PIPE CONDUIT 18IN-STORM DRAIN	LF	78.				
150	714	4107	PIPE CONDUIT 24IN-STORM DRAIN	LF	226.				
151	714	4117	PIPE CONDUIT 36IN-STORM DRAIN	LF	626.				
152	714	4121	PIPE CONDUIT 42IN-STORM DRAIN	LF	136.				
153	714	4131	PIPE CONDUIT 54IN-STORM DRAIN	LF	65.				
154	714	4216	PIPE CONDUIT ARCH 22IN X 13IN	LF	30.				
			SUBTOTAL OPTION 1						
<b>OPTION 2</b>									

BID ITEMS

Projects: SU-3-982(031)035 (PCN-21609), NHU-3-019(044)155 (PCN-17505), and NHU-3-020(074)103 (PCN-17504)

**Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
155	714	0210	PIPE CONC REINF 15IN CL III-STORM DRAIN	LF	767.				
156	714	0315	PIPE CONC REINF 18IN CL III-STORM DRAIN	LF	78.				
157	714	0620	PIPE CONC REINF 24IN CL III-STORM DRAIN	LF	226.				
158	714	0910	PIPE CONC REINF 36IN CL III-STORM DRAIN	LF	626.				
159	714	1010	PIPE CONC REINF 42IN CL III-STORM DRAIN	LF	136.				
160	714	1212	PIPE CONC REINF 54IN CL III-STORM DRAIN	LF	65.				
161	714	2101	PIPE CONC REINF ARCH 22IN X 13IN CL III-S DRAIN	LF	30.				
			SUBTOTAL OPTION 2						
			<b>OPTION 3</b>						
162	714	4097	PIPE CONDUIT 15IN-STORM DRAIN	LF	145.				
163	714	4121	PIPE CONDUIT 42IN-STORM DRAIN	LF	31.				
164	714	4131	PIPE CONDUIT 54IN-STORM DRAIN	LF	412.				
			SUBTOTAL OPTION 3						
			<b>OPTION 4</b>						



**PROPOSAL FORM**

North Dakota Department of Transportation

**BID OPENING: October 14, 2016**

**Job 007**

Page 19 of 20

Rev: 10/6/2016

**Projects:** SU-3-982(031)035 (PCN-21609), NHU-3-019(044)155 (PCN-17505), and NHU-3-020(074)103 (PCN-17504)

**Type of Work:** GRADING, SURFACING, STORM DRAIN, BRIDGES, RAILROAD EMBANKMENT, RAILROAD BALLAST, LIGHTING, TRAFFIC SIGNAL, MARKING, CONCRETE SIDEWALK, RETAINING WALL, AND INCIDENTALS

**County:** RAMSEY

**Length:** 1.2220 Miles

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**TIME FOR COMPLETION:**

The undersigned Bidder agrees, if awarded the contract, to prosecute the work with sufficient forces and equipment to complete the contract work within the allowable time specified as follows:

**WORKING DAY CONTRACT:** NA working days are provided. The Department will begin charging working days beginning NA or the date work begins on the project site, whichever is earlier.

**CALENDAR DAY CONTRACT:** NA calendar days are provided. The completion date will be determined by adding NA calendar days to NA or the date work begins on the project site, whichever is earlier.

**COMPLETION DATE CONTRACT** The project completion date is NA. The Department provides a minimum of NA working days. The Department will begin charging working days beginning NA or the date work begins on the project site, whichever is earlier.

**REFER TO SP 321(14).**

## NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

### SPECIAL PROVISION

### CONSTRUCTION REQUIREMENTS

**Projects: NHU-3-019(044)155 - PCN 17505**  
**NHU-3-020(074)103 - PCN 17504**  
**SU-3-982(031)035 - PCN 21609**

#### DESCRIPTION

This project will have four different completion dates.

Complete the following work by August 6, 2017:

1. Detour Route Paving
2. Shoofly Bridge
3. Grading for Shoofly and Temporary Tracks
4. Railroad Sub-Ballast for Shoofly and Temporary Tracks

Complete the following railroad work by June 3, 2018:

1. Permanent Bridge
2. Grading for Proposed Tracks
3. Sub-Ballast & Hot Mix Asphalt

Any costs asserted by BNSF for failure to meet these completion dates will be the responsibility of the Contractor.

Coordinate with BNSF railroad to ensure timely completion of work. BNSF contact information:

Richard Scott  
Manager Public Projects  
BNSF Railway Company  
763-782-3492 office  
richard.scott2@bnsf.com

Complete the following work by October 27, 2018:

1. Removal of Shoofly Bridge
2. All Grading Work
3. Concrete Paving
4. Sidewalk and Curb & Gutter
5. Striping
6. Signing
7. Lighting
8. Traffic Signals

Failure to complete this work by October 27, 2018 will result in liquidated damages charged in accordance with Section 108.07 B.

Complete all remaining work by June 15, 2019. Failure to complete the remaining work by June 15, 2019 will result in liquidated damages charged at a rate of \$1,000 per calendar day.

According to Note 704-P03, the Contractor has a total of 72 days to close Hwy 20 and detour traffic around the site. If the road closure exceeds the 72 days listed, the Contractor will be charged a user delay cost of \$4,500 per day the road is closed.

According to Note 704-P03, the Contractor has a total of 28 days to reduce traffic to one lane on Hwy 20 to construct Phases 8 & 9. If the lane closure exceeds the 28 days listed, the Contractor will be charged a user delay cost of \$2,250 per day the lane closure is up.

### **WINTER WORK**

Complete the following work to any area that the Contractor is not actively working on between the dates of November 18, 2017 & April 14, 2018 and November 17, 2018 & April 14, 2019.

1. Replace pavement marking that is removed or faded during construction. This work will be paid under the bid items for short term pavement marking.
2. Stabilize any disturbed areas including all staging areas according to the SWPPP.
3. Maintain drainage to inlets and do not allow water to pond between inlets.
4. Remove all equipment and construction materials from the Right of Way and Temporary Construction Easements in areas that are not being actively worked on unless written permission is granted from the Engineer.
5. Maintain traffic control devices. Post mount or anchor traffic control signs. These signs and devices will be paid for at the contract prices bid for the respective items.
6. Coordinate with the City during snow removal operations.

Failure to meet these requirements will result in liquidated damages charged at a rate of \$4,000 per day until all requirements are met.

Liquidated damages will not be charged concurrently. However, user delay costs will be charged concurrently with liquidated damages, if applicable.

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION****SPECIAL PROVISION****WORK ZONE CAMERA SYSTEM****PROJECT 3-020(074)103 – PCN 17504  
3-019(044)155 – PCN 17505****DESCRIPTION**

Provide a self-powered mobile trailer webcam to allow users to remotely view the project by a secure network connection.

**EQUIPMENT****A. General.**

Provide a camera from one of the following:

- Live View Technologies;
- EarthCam; or
- An approved equal.

**B. Trailer Camera System (Camera).**

Provide a trailer mounted cellular communicating camera system with the following:

- 30' adjustable telescoping mast;
- 2" ball hitch;
- Manual outriggers or guide wires for stability;
- Solar power capable of operating without sun for a minimum of 10 days; and
- Pan Tilt Zoom (PTZ) Camera:
  - 768 x 494 resolution;
  - 30x optical and 12x digital zoom;
  - 360° continuous pan, +2° to 92° tilt;
  - Low light capable;
  - 30 fps in all resolutions;
  - On-board data back-up to provide minimum twenty days image retention;
  - 8 customizable presets; and
  - Preset tour capable.

**C. Online Interface.**

Provide a secure online interface to allow users to access the feed using account security features including the following:

- IP address block/ permission;
- 20 separate user accounts with passwords; and
- SSL protection of user login.

Capture and upload images every 15 minutes, 24 hours a day to the online interface. Keep the images available for a minimum of 60 days after the project completion.

Provide an archived schedule of still photos and a calendar based system to allow for images to be selected by date and time.

Provide the users a real-time video viewing that allows the user to do the following:

- Control the pan, tilt, zoom functions of the camera;
- Capable of capturing a live shot; and
- Full screen mode.

Include a time-lapse feature that allows for viewing by the day, week, month, and year.

**CONSTRUCTION REQUIREMENTS**

**A. Installation.**

Before beginning construction, install the camera at a location that will provide an unobstructed view of the bridge construction, as approved by the Engineer.

If the Engineer deems that the location does not provide an unobstructed view, move the camera to a new location

**B. Moving the Camera during Construction.**

If the camera needs to be moved because of construction phasing, notify the Engineer 24 hours before the camera is moved.

Move the camera to a new location with an unobstructed view and have all functions of the camera restored within 24 hours of the move.

**C. Maintenance and Support.**

Maintain 98% reliability on the camera for the duration of the project.

Notify the Engineer if the camera goes out of service. Provide service on the camera within 24 hours. If the camera is out of service for more than 48, provide a new camera system.

**D. Removal.**

Do not remove the camera until it is released by the Engineer or the final completion date, including any extension approved by the Engineer.

The camera system will remain the property of the Contractor at the end of the project.

**METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

<b>Pay Item</b>	<b>Pay Unit</b>
Video Monitoring System	Each

Such payment is full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

## NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

### SPECIAL PROVISION

#### CONDITIONS OF CONTRACT AWARD

#### **PROJECT 3-019(044)155 – PCN 17505 & 3-020(074)103 – PCN 17504**

This contract includes installing pipe that will be either reinforced concrete or flexible pipe as specified in section 51 of the plans.

The Bidder must bid both of the following options for the bid to be considered a responsive bid:

##### **Project NHU-3-020(074)103**

- Option 1 is Pipe Conduit Storm Sewer
- Option 2 is Reinforced Concrete Pipe Storm Sewer

##### **PROJECT NHU-3-019(044)155**

- Option 3 is Pipe Conduit Storm Sewer
- Option 4 is Reinforced Concrete Pipe Storm Sewer

A “zero” bid for an option will not be considered a responsible bid. Bids that are not responsive fail to meet the requirements of the “Invitation to Bid” and will not be accepted.

The contract will be awarded to the lowest responsible bidder, defined as the bidder with the lowest sum total of the base bid and the lower amount of the two options bid.

The Project Bids software will determine the total bid amount by calculating the lowest sum total of the base bid and the lower amount of the two options bid.

The Department and the City reserve the right to construct the project with the pipe option of the choice after award of the contract.

## NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

### SPECIAL PROVISION

#### MASS CONCRETE

**Project 3-020(074)103 – PCN 17504 &  
3-019(044)155 – PCN 17505**

#### DESCRIPTION

This work consists of controlling the temperature of mass concrete elements for the purpose of minimizing thermal cracking during the curing process. This special provision was developed using ACI 301-16 “Specifications for Structural Concrete”.

#### MATERIALS

Item	Section
Admixtures	808
Fly Ash	820

#### CONSTRUCTION REQUIREMENTS

##### A. Mass Concrete Elements

The following elements in the permanent structure for Mass Concrete:

- Abutment Bearing Seat;
- Pier Footings; and
- Pier Columns.

##### B. Mass Concrete Mix Design.

###### 1. General.

Develop a mix design for each mass concrete element.

Changes in aggregate, cementitious material or water weights of more than 3%, not including specific gravity or absorption changes, or aggregate source will require a new mix design.

Any changes in admixtures will require a new mix design.

If changes are made to the mix design, re-submit the mix design for review and acceptance. Do not use the revised mix design until it is reviewed and accepted.

If placed concrete is out of tolerance with the accepted mix design as defined in this section, remove and replace the concrete with material that meets the tolerances of the accepted mix design.

###### 2. Compressive Strength.

The 28-day strength may be attained at 56 days for mix designs that include fly ash. No individual strength test results will be below 80% of the  $f'c$  at 28 days.

Apply a correction factor of 0.92 when using 4 inch x 8 inch concrete cylinders.

**3. Finely Divided Mineral Admixtures.**

Use fly ash to replace cement on a 1:1 ratio, by weight, between 25 and 40 percent.

**4. Admixtures.**

Include any admixtures in the proposed concrete mix design.

Do not use admixtures that contain chloride.

**5. Sample Preparation and Testing.**

Develop trial batches and prepare the samples according to ACI 301, "Specification for Structural Concrete". Perform testing of the trial batches in an AASHTO laboratory certified for Portland Cement Concrete.

Test the plastic properties of the concrete after all admixtures are added.

Cure all concrete cylinders used for compressive strength according to ASTM C 511.

**6. Mix Design Documentation.**

Include the following certified test data:

- Fine Aggregate:
  - Weight (lbs - SSD);
  - Source;
  - Type;
  - Specific gravity; and
  - Percent Absorption;
- Coarse Aggregate:
  - Weight (lbs – SSD);
  - Source;
  - Size;
  - Specific gravity; and
  - Percent Absorption
- Cement:
  - Weight;
  - Source;
  - Specific gravity; and
  - Type;
- Fly Ash:
  - Weight (lbs)
  - Source; and
  - Specific Gravity;
- Weight of Water (lbs.).
- Admixtures:
  - Type;
  - Brand Name; and
  - Dosage;
- Water/Cement Ratio (including all cement and fly ash); and
- The following test results:

- Concrete Temperature;
- Tested Slump;
- Tested Air Content;
- Unit weight;
- Yield;
- Tested Strength moist room cured testing at following days:
  - 3;
  - 7;
  - 14;
  - 28; and
  - 56 days, if required;
- Strength Gain Curves; and
- Rapid Chloride Permeability Test Results AASHTO T277.

Create a 9 yard trial batch of each mix design to assess workability. If the trial batch is not workable, modify the mix design or batching sequence and retest.

### **C. Thermal Control Plan**

Develop a Thermal Control Plan according to ACI 301 Section 8.1.4 "Submittals" with the following additions:

- Identify the thermal modeling software used and, if commercially available, provide a copy of the software with one license for use by the Engineer.
- The site and element data used for modelling with the following:
  - Input parameters;
  - Output data;
  - Results;
  - Summary of findings; and
  - Thermal control direction for each element.
- Describe the methods used to control the maximum temperature and temperature differentials for each element.

### **D. Submittals.**

#### **1. General.**

Deliver the samples, the mix design, and the thermal control plan to the Materials and Research Division 30 calendar days before placing any mass concrete. The Materials and Research Division will verify the mix design.

Provide materials that are the same as those used on the project. Attach a tag to the samples identifying the Departments project number and type of material.

Supply samples of material based on the minimum sample size in Table 1. Provide additional material upon request.

**Table 1**  
**Minimum Mix Design Sample Size**

<b>Material</b>	<b>Sample Size</b>
Cement	100 lb
Fly Ash	35 lb
Aggregate	1000 lb
Admixtures	1/2 pint each

**2. Mix Design Acceptance.**

Acceptance of the mix design is based upon trial batching and testing results.

The Engineer has 30 calendar days to review the mix design.

If the mix design is rejected develop a new mix design.

**E. Temperature Limitations and Monitoring.**

**1. General.**

Maintain the temperature conditions from the time of concrete placement until all interior concrete temperatures are decreasing.

Provide concrete to the project that does not exceed 70°F at time of placement.

**2. Use of Ice.**

Ice may be used to reduce the heat of hydration. If ice is used, use ice particles smaller than 3/8 inch. Add ice in controlled quantities. The quantity of ice used will replace an equal weight of mixing water. Blend concrete so there is no ice during placement.

**3. Temperature Monitoring and Recording Devices and Locations.**

Place temperature monitoring and recording devices in the locations shown in ACI 301 Section 8.3.1.2(a) "Monitoring of Temperatures" with the following exception.

Provide a temperature monitoring and recording device that operates in a range of 0 to 200°F ( $\pm 2^\circ\text{F}$ ).

**4. Automatic Temperature Devices.**

Provide Automatic Temperature Devices that begin recording immediately after completion of a pour and continue until 24 hours after the following conditions are met:

- Maximum temperature differential is reached and begins to drop; and
- Maximum peak curing temperature is reached and begins to drop; and
- All formwork, insulation, and other temporary items have been removed from the mass concrete element and it is exposed to ambient temperature and the environment.

Physically verify the readings of the sensors for temperature and differential temperature every 4 hours to confirm the automatic temperature devices are working and address any issues that occur. Record all readings of the actively monitored temperature and differential temperatures.

Transmit all temperature readings, data logs, and graphs at the end of every 4 hour period.

**5. Maximum Peak Curing Temperature**

Do not allow the maximum peak temperature to exceed 150°F.

**6. Maximum Temperature Differential**

During the curing period, the measured temperature differential will not exceed 35°F.

**7. Thermal Protection.**

Remove thermal protections only after the following criteria are met:

- The temperature difference between the ambient air temperature and a point 2 inches inside the element has reached its maximum and is decreasing; and
- The temperature difference between a point 2 inches inside the element and the center of the element has reached its maximum and is decreasing.

Remove thermal protection gradually so that the rate of temperature reduction to the surface does not exceed 15°F during any 12 hour period. Continue removing the thermal protection until the concrete surface reaches the ambient air temperature.

**F. Corrective Action.**

If monitoring indicates that any temperatures differential exceeds 35°F or the maximum temperature exceeds 145°F, immediately contact the Engineer and take action to reduce the temperature to within acceptable range.

Revise the Thermal Control Plan to reduce the temperatures of the Mass Concrete for future mass concrete pours. Submit the revised Thermal Control Plan for review 14 days before the next Mass Concrete placement.

**G. Cracks.**

Inspect the Mass Concrete element and determine the nature of any cracking.

The Engineer will inspect all cracking that occurs on all mass concrete elements.

The Engineer and Bridge Division will make a determination on replacement or repair of the Mass Concrete element after all thermal control and cooling operations are complete.

**H. Future Work.**

Allow the concrete element to develop a minimum of 80% of the designed strength before loading with successive lifts or elements.

Before superstructure construction, allow the substructure to achieve design strength.

**METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Include the costs associated for Mass Concrete in the contract unit price of Class AAE-3 Concrete.

## **NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**

### **SPECIAL PROVISION**

### **BRIDGE DISC BEARINGS**

### **PROJECT NHU-3-020(074)103 – PCN 17504**

#### **DESCRIPTION**

This work consists of designing, fabricating, furnishing and testing fixed, uni-directional and multi-directional, high load disc bearings and installing the disc bearing assemblies at the locations shown in the Contract Plans in accordance with these special provisions.

Disc bearings will consist of a polyether urethane structural element (disc) confined by upper and lower steel bearing plates. Where required, the bearing will be equipped with shear restriction mechanisms to prevent lateral or longitudinal movement of the bearing. Bearings will adequately provide for the applied vertical and lateral loads, expansion and contraction movements, and rotation.

Disc bearings will be supplied as fixed bearings, guided longitudinal expansion bearings, guided lateral expansion bearings and non-guided (multi-directional) expansion bearings as designated by the Contract Plans.

#### **MATERIALS**

- A.** All materials will be in accordance with the following:
  - a. Section 834.01A or 834.01B of the North Dakota Department of Transportation's (NDDOT) Standard Specifications for Road and Bridge Construction
  - b. Chapter 15 of the AREMA Manual for Railway Engineering, Part 5, Bearing Design and Construction
- B.** Completely zinc-metalize all exposed steel surfaces, except the stainless steel sliding surface, in accordance with AWS C2.2 to a thickness of 8 mils.

#### **CONSTRUCTION REQUIREMENTS**

##### **A. Acceptance Qualification Requirements**

Bearings and bearing suppliers will conform to the qualification requirements for acceptance specified below:

1. The bearing designer/supplier will show previous history in the design, fabrication, testing and installation of disc bearings similar to those required by the Contract. Documentation showing a minimum of five (5) years of experience or five (5) similar bridge installations will be submitted.

2. All bearings and bearing components will be designed, fabricated, tested, and installed in accordance with Chapter 15 of the AREMA Manual for Railway Engineering, Part 5, Bearing Design and Construction. No long-term deterioration test need be performed for this project, although a minimum of two tests (one for fixed bearing and one for an expansion bearing) from previously tested similar type bearings will be submitted.
3. Sliding bearings will be stiff in shear, demonstrating negligible shear displacements within the load-bearing element.
4. The Supplier will provide a copy of the manufacturing specification used on the project to demonstrate that all design, testing and manufacturing conforms to the requirements of these special provisions.

## **B. Work Drawings**

1. Provide all submittals to the Engineer for review and acceptance as required by the following:
  - a. Section 105.08 of the NDDOT's Standard Specifications for Road and Bridge Construction
  - b. Chapter 15 of the AREMA Manual for Railway Engineering, Part 5, Bearing Design and Construction
2. Ensure that the submitted work drawings have been reviewed and accepted by the Engineer prior to the fabrication of the bearings and construction of the abutment beam seat and the upper lift of the piers. Submitted work drawings will include, but are not limited to, the following information:
  - a. Plan and Elevation of each disc bearing assembly type and size.
  - b. Complete details and sections for all assemblies with all materials identified with ASTM, AASHTO or other appropriate designations.
  - c. If applicable, a clear description of welding processes in conformance with the current AASHTO/AWS D1.5M/D1.5 Bridge Welding Code.
  - d. Anchor bolts that develop into structural concrete. Embedment length and diameter will be included in the design.
  - e. Vertical, horizontal, and uplift load capacities.
  - f. All movement capacities and a temperature setting table.
  - g. Design, installation, and tightening specifications for all bearing assembly bolts.
  - h. All bearing connection details.
  - i. All surface coatings and processes used to apply the surface coatings.

- j. Complete design calculations verifying conformance with this specification and Chapter 15 of the AREMA Manual for Railway Engineering, Part 5, Bearing Design and Construction.
  - k. The manufacturer's name, location of fabrication plant and the name of the representative who will be responsible for coordinating production, inspection, sampling and testing.
3. A Professional Engineer registered in North Dakota, who is employed by the disc bearing manufacturer, will stamp the work drawings.

**C. Design, Fabrication and Construction**

- 1. Fabricate bearings such that the sliding friction coefficient between the Polytetrafluoroethylene (PTFE) and stainless steel is not more than 0.08 when tested in accordance with Chapter 15 of the AREMA Manual for Railway Engineering Specification, Part 5, Bearing Design and Construction.
- 2. Design and fabricate all bearings so that they can be readily inspected and easily removed and replaced during the service life of the bridge.
- 3. All components of the bearing device, except masonry and sole plates, will be designed to be replaceable by jacking (lifting) the superstructure no more than 3/8 inches.
- 4. Anchor bolts will embed in abutment seats and piers. Anchor bolts will be located to ensure no conflicts and proper cover. Sleeves to allow for grouting of anchor bolts will be cast into the abutment seats and piers. Core drilling for anchor bolts is not allowed.
- 5. Fabrication:
  - a. Provide the Engineer with written notification thirty (30) days prior to the start of bearing fabrication. This notification will include certification that work drawings include the required information specified herein and that the work drawings have been reviewed and accepted by the Engineer.
  - b. The bearing fabricator will be certified by the American Institute of Steel Construction (AISC) in accordance with the requirements of Chapter 15 of the AREMA Manual for Railway Engineering, Part 5, Bearing Design and Construction.
  - c. Conform all welding to and all welders will be qualified in accordance with the requirements of AASHTO/AWS D1.5M/D1.5 Bridge Welding Code.
  - d. All bearing surfaces will be finished or machined flat within the tolerances stated in Chapter 15 of the AREMA Manual for Railway Engineering, Part 5, Bearing Design and Construction. Out-of-flatness tolerance on any plate and plate surface will be cause for rejection.
  - e. Provide permanent identifying marks on all bearings in accordance with Chapter 15 of the AREMA Manual for Railway Engineering, Part 5, Bearing Design and Construction.

- f. After fabrication, the complete bearing assembly (including masonry and sole plates) will be bound together with steel strapping or other means to prevent disassembly during shipping and storing. Packaging will be adequate to prevent damage from impact as well as from dust and moisture contamination during shipping and storage. Bearings that have become damaged, corroded or disassembled may be subject to rejection and replacement at no additional cost to the Department.

#### **D Production Bearing Sampling and Testing.**

1. Production bearing sampling and testing will be performed in accordance with Chapter 15 of the AREMA Manual for Railway Engineering, Part 5, Bearing Design and Construction.
2. Production bearing sampling and testing will be performed in accordance with Chapter 15 of the AREMA Manual for Railway Engineering, Part 5, Bearing Design and Construction, with sample requirements as contained herein.
3. Some testing required in Chapter 15 of the AREMA Manual for Railway Engineering, Part 5, Bearing Design and Construction has significant lead time that will be included in the Contractor's schedule such that all testing is completed in advance of installation as needed.
4. Solely at the discretion of the Engineer, bearings meeting all other testing requirements may be installed at the Contractor's sole risk prior to completion of all tests if previously approved by the Engineer, and with proper, acceptable, and successful testing documentation for similar bearings of the same design successfully tested and installed within the last 3 years. Proceeding in this fashion is solely at the Contractor's risk and will result in no additional cost to the Department and no extension of schedule. Final testing results showing conformance will be submitted. Final testing results showing non-conformance will require removal and replacement of the bearing with new bearings meeting testing requirements at no cost to the Department and with no schedule extension.
5. Acceptance of bearings will be in accordance with Chapter 15 of the AREMA Manual for Railway Engineering, Part 5, Bearing Design and Construction.

#### **E. Installation**

1. No bolts will be removed from any bearing type.
2. Install bearings in accordance with the manufacturer's recommendations. Provide a manufacturer's technical representative for the installation of the first bearing and for subsequent bearings at the discretion of the Engineer.
3. Measures will be taken to prevent the rotation of bearings during shipping, storing, and installation. In no case will the bearings be rotated beyond design values. Bearings that have been over-rotated will be replaced at no cost to the Department and no additional schedule.
4. Bearings will be installed within  $\frac{1}{4}$  inch of their plan location with respect to the supporting element (abutment seat or pier).

5. Bearings will be installed within a tolerance of 0.005 radians of true level.
6. Bearings assemblies will be handled by their bottom surfaces only. Do not lift bearings by their tops, sides and/or shipping bands.
7. No field welding of bearing assemblies, except for attachment of girder flange to sole plate, will be allowed.

**F. Certificates of Compliance**

In addition to records of test results, submit Certificates of Compliance for the bearings indicating that the materials, fabrication, testing, and installation meet all specified requirements.

**BASIS OF PAYMENT**

Such payment is full compensation for furnishing all materials, equipment, labor and incidentals to complete the work as specified.

<b>Bid Item</b>	<b>Unit</b>
Bearings (Expansion)	Each
Bearings (Fixed)	Each

Payment will be made in accordance with the above and is full compensation for the specified work.

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION**

**RAILROAD EASEMENT REQUIREMENTS**

**PROJECT 3-020(074)103 - PCN 17504 &  
3-019(044)155 – PCN 17505**

This Special Provision incorporates the Easement Agreement entered into by and between the North Dakota Department of Transportation and the Burlington Northern and Santa Fe Railway Company (BNSF).

Bidders shall become familiar with all the provisions of the agreement and submit their bid for the construction of this Project based on a plan for construction which will meet all conditions of the agreement.

The Contractor and Subcontractors on this Project shall be responsible for fulfilling all the applicable requirements and complying with all the terms and conditions as contained in the Easement Agreement attached hereto.

(Easement Agreement with BNSF attached.)

NDDOT  
ORIGINAL

**EASEMENT AGREEMENT  
FOR ROADWAY CONSTRUCTION, MAINTENANCE AND USE**

THIS EASEMENT AGREEMENT FOR ROADWAY CONSTRUCTION, MAINTENANCE AND USE ("**Easement Agreement**") is made and entered into as of the 16<sup>th</sup> day of July, 2016 ("**Effective Date**"), by and between BNSF RAILWAY COMPANY, a Delaware corporation ("**Grantor**"), and NORTH DAKOTA DEPARTMENT OF TRANSPORTATION ("**Grantee**").

A. Grantor owns or controls certain real property situated at or near the City of Devils Lake, County of Ramsey, State of North Dakota, at Mile Post 85.21, [Project # NHU-3-020(074)103], as described or depicted on **Exhibit "A"** attached hereto and made a part hereof (the "**Premises**") and on **Exhibit "B"** attached hereto and made a part hereof (the "**Temporary Premises**").

B. Grantee has requested that Grantor grant to Grantee an easement over the Premises for the Easement Purpose (as defined below).

C. Grantor has agreed to grant Grantee such easement, subject to the terms and conditions set forth in this Easement Agreement.

NOW, THEREFORE, for and in consideration of the foregoing recitals which are incorporated herein, the mutual promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

**Section 1     Granting of Easement.**

1.1 **Easement Purpose.** The "**Easement Purpose**" shall be the construction, maintenance and use of a public roadway and related improvements as described in the Construction and Maintenance Agreement covering the Premises that has been entered into between the parties hereto (collectively, "**Improvements**") to be constructed, located, configured and maintained by Grantee in strict accordance with the terms of this Easement Agreement and the Plans and Specifications (as hereinafter defined). **This Agreement shall be subject to the terms of the Construction and Maintenance Agreement.**

1.2 **Grant.** Grantor does hereby grant unto Grantee a non-exclusive easement ("**Easement**") over the Premises for the Easement Purpose and for no other purpose. The Easement is granted subject to any and all restrictions, covenants, easements, licenses, permits, leases and other encumbrances of whatsoever nature whether or not of record, if any, relating to the Premises and subject to all Laws (as hereinafter defined), including without limitation zoning laws, regulations, and ordinances of municipal and other governmental authorities, if any.

1.3 **Reservations by Grantor.** Grantor excepts and reserves the right, to be exercised by Grantor and any other parties who may obtain written permission or authority from Grantor:

- (a) to install, construct, maintain, renew, repair, replace, use, operate, change, modify and relocate any existing pipe, power, communication, cable, or utility lines and appurtenances and other facilities or structures of like character (collectively, "**Lines**") upon, over, under or across the Premises;
- (b) to install, construct, maintain, renew, repair, replace, use, operate, change, modify and relocate any tracks or additional facilities or structures upon, over, under or across the Premises; and
- (c) to use the Premises in any manner as the Grantor in its sole discretion deems appropriate, provided Grantor uses all commercially reasonable efforts to avoid material interference with the use of the Premises by Grantee for the Easement Purpose.

Law Department Approved

1.4 **Term of Easement.** The term of the Permanent Easement, Parcel 4-3 and 4-4, unless sooner terminated under provisions of this Easement Agreement, shall be perpetual. The term of the Temporary Easement, Parcels 4-2, 4A-2, 5-1, 5-2, and 5A-2, unless sooner terminated under provisions of this Easement Agreement shall expire on the date that is three (3) years after the Effective Date.

**Section 2 Compensation.** Grantee shall pay Grantor, prior to the Effective Date, the sum of TWO HUNDRED FORTY-TWO THOUSAND FORTY-NINE 36/100 Dollars (\$242,049.36) plus a transaction fee of TWO THOUSAND and no/100 Dollars (\$2000.00) as compensation for the grant of this Easement.

**Section 3 No Warranty of Any Conditions of the Premises.** Grantee acknowledges that Grantor has made no representation whatsoever to Grantee concerning the state or condition of the Premises, or any personal property located thereon, or the nature or extent of Grantor's ownership interest in the Premises. Grantee has not relied on any statement or declaration of Grantor, oral or in writing, as an inducement to entering into this Easement Agreement, other than as set forth herein. GRANTOR HEREBY DISCLAIMS ANY REPRESENTATION OR WARRANTY, WHETHER EXPRESS OR IMPLIED, AS TO THE DESIGN OR CONDITION OF ANY PROPERTY PRESENT ON OR CONSTITUTING THE PREMISES, ITS MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, THE QUALITY OF THE MATERIAL OR WORKMANSHIP OF ANY SUCH PROPERTY, OR THE CONFORMITY OF ANY SUCH PROPERTY TO ITS INTENDED USES. GRANTOR SHALL NOT BE RESPONSIBLE TO GRANTEE OR ANY OF GRANTEE'S CONTRACTORS FOR ANY DAMAGES RELATING TO THE DESIGN, CONDITION, QUALITY, SAFETY, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY PROPERTY PRESENT ON OR CONSTITUTING THE PREMISES, OR THE CONFORMITY OF ANY SUCH PROPERTY TO ITS INTENDED USES. GRANTEE ACCEPTS ALL RIGHTS GRANTED UNDER THIS EASEMENT AGREEMENT IN THE PREMISES IN AN "AS IS, WHERE IS" AND "WITH ALL FAULTS" CONDITION, AND SUBJECT TO ALL LIMITATIONS ON GRANTOR'S RIGHTS, INTERESTS AND TITLE TO THE PREMISES. Grantee has inspected or will inspect the Premises, and enters upon Grantor's rail corridor and property with knowledge of its physical condition and the danger inherent in Grantor's rail operations on or near the Premises. Grantee acknowledges that this Easement Agreement does not contain any implied warranties that Grantee or Grantee's Contractors (as hereinafter defined) can successfully construct or operate the Improvements.

**Section 4 Nature of Grantor's Interest in the Premises.** GRANTOR DOES NOT WARRANT ITS TITLE TO THE PREMISES NOR UNDERTAKE TO DEFEND GRANTEE IN THE PEACEABLE POSSESSION OR USE THEREOF. NO COVENANT OF QUIET ENJOYMENT IS MADE. In case of the eviction of Grantee by anyone owning or claiming title to or any interest in the Premises, or by the abandonment by Grantor of the affected rail corridor, Grantor shall not be liable to refund Grantee any compensation paid hereunder.

**Section 5 Plans and Specifications for Improvements.** Grantee shall submit to Grantor for its review detailed information concerning the design, location and configuration of the Improvements ("Plans and Specifications"). As soon as reasonably practicable after Grantor's receipt of the Plans and Specifications and other information required by Grantor about the proposed location of the Improvements, Grantor will notify Grantee in writing whether or not, in Grantor's sole judgment, construction, maintenance, operation or removal of all or any part of the Improvements constructed in accordance with the Plans and Specifications would cause Grantee to violate any of the provisions of Section 6.3 hereof. Following any notice from Grantor that implementation of the Plans and Specifications would in Grantor's judgment cause Grantee to violate any of the provisions of Section 6.3 hereof, Grantee shall have the right to modify the location, configuration or other aspects of the Plans and Specifications of the proposed Improvements and to resubmit such modified information to Grantor for its further review. Despite Grantor's review of the Plans and Specifications, any deficiency in design or construction shall be solely the responsibility of Grantee.

**Section 6 Improvements.**

6.1 **Construction of Improvements.** Grantee, and Grantee's Contractors, at Grantee's sole cost and expense, shall locate, configure, construct and maintain the Improvements: (i) in a good and workmanlike manner and in strict accordance with the Plans and Specifications pursuant to the provisions of Section 5 above, (ii) in conformance with applicable building uses and all applicable engineering, safety and other Laws, (iii) in accordance with the highest accepted industry standards of care, skill and diligence, and (iv) in such a manner as shall not adversely affect the structural integrity or maintenance of the Premises, any structures on or

near the Premises, or any lateral support of structures adjacent to or in the proximity of the Premises. The construction of the Improvements within the Premises shall be completed by Grantee and Grantee's Contractors within three (3) years after the Effective Date. Grantee shall provide as built drawings of all Improvements to Grantor promptly upon completion of construction and shall use its best efforts to cause such as built drawings to be electronically accessible to Grantor.

6.2 Maintenance of Improvements. Grantee shall at all times during the term of this Easement Agreement, at Grantee's sole cost and expense, keep and maintain the Improvements located upon the Premises in a structurally safe and sound condition, in good repair and in compliance with the Plans and Specifications and this Easement Agreement. Grantee shall also promptly repair any damage to the Premises or the Improvements caused, either in whole or in part, by Grantee Parties (as hereinafter defined). Grantee shall not cause or permit another person to cause any damage to the Premises or the Improvements, and Grantee shall be responsible for any such damage which may occur as a result of any Grantee Party's action or inaction. Grantee shall not permit the existence of any nuisance or the accumulation of junk, debris or other unsightly materials on the Premises and shall keep the Premises in a clean and safe condition. Grantee shall keep the Premises free and clear from combustible materials and to cut and remove or cause to be cut and removed at its sole expense all weeds and vegetation on the Premises, said work of cutting and removal to be done at such times and with such frequency as to comply with local Laws and regulations and abate any and all hazard of fire. Grantor shall have no obligation whatsoever, monetary or non-monetary, to maintain the Improvements in the Premises.

6.3 No Interference. During the construction of, and any subsequent maintenance performed on, operation of, or removal of, all or any portion of the Improvements, Grantee, at Grantee's sole cost, shall perform all activities and work on or near Grantor's rail corridor or property and/or the Premises in such a manner as to preclude injury to persons or damage to the property of Grantor, or any party on or with property on Grantor's rail corridor or property, and shall ensure that there is no interference with the railroad operations or other activities of Grantor, or anyone present on Grantor's rail corridor or property with the authority or permission of Grantor. Grantee shall not disturb any improvements of Grantor or Grantor's existing lessees, licensees, license beneficiaries or lien holders, if any, or interfere with the use of such improvements. Grantor may direct one of its field engineers to observe or inspect the construction, maintenance, operation or removal of the Improvements, or any portion thereof, at any time to ensure such safety and noninterference, and to ensure that the Improvements comply with the Plans and Specifications. If any Grantee Party is ordered at any time to leave the Premises or to halt any activity on the Premises, then the party conducting that activity immediately shall cease such activity and leave the Premises, if the order was issued by Grantor's personnel to promote safety, such noninterference with other activities or property, or because the Improvements were not in compliance with this Easement Agreement. Notwithstanding the foregoing right of Grantor, Grantor has no duty or obligation to observe or inspect, or to halt work on, the Premises, it being solely Grantee's responsibility to ensure that the Improvements are constructed, maintained, operated and removed in strict accordance with all Laws, safety measures, such noninterference and the Plans and Specifications and in compliance with all terms hereof. Neither the exercise nor the failure by Grantor to exercise any right set forth in this **Section 6.3** shall alter the liability allocation set forth in this Easement Agreement.

6.4 No Alterations. Except as may be shown in the Plans and Specifications for the Easement, Grantee may not make any alterations to the Premises, or permanently affix anything to the Premises, without Grantor's prior written consent. If Grantee desires to change either the location of any of the Improvements or any other aspect of the Plans and Specifications of any of the Improvements, Grantee shall submit such change and modified Plans and Specifications to Grantor in writing for its review in the same manner as provided for in **Section 5**. Grantee shall have no right to commence any such change until after Grantee has received Grantor's written comments of its review.

6.5 Approvals; Compliance with Laws and Safety Rules.

- (a) Grantee shall take, in a timely manner, all actions necessary and proper to the lawful establishment, construction, operation, and maintenance of the Improvements, including such actions as may be necessary to obtain any required approvals or authorizations from applicable governmental authorities.

- (b) Prior to entering the Premises, and at all times during the term of this Easement Agreement, Grantee shall comply, and shall cause its contractor, any subcontractor, any assignee, and any contractor or subcontractor of any assignee performing work on the Premises or entering the Premises on behalf of Grantee (collectively, "**Grantee's Contractors**"), to comply, with all applicable federal, state and local laws, regulations, ordinances, restrictions, covenants and court or administrative decisions and orders, including Environmental Laws (defined below) (collectively, "**Laws**"), and all of Grantor's applicable safety rules and regulations including those found on the website noted below in **Section 6.5(c)**.
- (c) No employees of Grantee's Contractors, or its subcontractors, agents or invitees, may enter the Premises without first having completed Grantor's safety orientation found on the website: [www.contractororientation.com](http://www.contractororientation.com).

6.6 Other Improvements. In the event any construction, repair, maintenance, work or other use of the Premises by Grantee will affect any Lines, fences, buildings, improvements or other facilities (collectively, "**Other Improvements**"), Grantee will be responsible at Grantee's sole risk to locate and make any adjustments necessary to such Other Improvements. Grantee must contact the owner(s) of the Other Improvements notifying them of any work that may damage these Other Improvements and/or interfere with their service and obtain the owner's written approval prior to so affecting the Other Improvements. Grantee must mark all Other Improvements on the Plans and Specifications and mark such Other Improvements in the field in order to verify their locations. Grantee must also use all reasonable methods when working on or near Grantor property to determine if any Other Improvements (fiber optic, cable, communication or otherwise) may exist.

6.7 Flagging and Other Costs. Grantee shall not conduct any activities on, or be present on, any portion of the Premises or Grantor's rail corridor or property that is within twenty-five (25) feet of any active railroad track, except in the presence of a flagman. In any case where a flagman or flagmen are required in connection with the presence of individuals on Grantor's rail corridor or the Premises, Grantee shall provide as much advance notice as possible prior to any entry upon the Premises. Grantor shall arrange for the presence of the flagman or flagmen as soon as practicable after receipt of such notice from Grantee. Grantee shall reimburse to Grantor, within thirty (30) days following Grantee's receipt of each bill therefor, Grantor's costs in arranging for and providing the flagman or flagmen, which shall be billed to Grantee at Grantor's then applicable standard rate. The estimated cost of one flagger as of the Effective Date is \$800 for an eight hour basic day with time and one-half or double time for overtime, rest days and holidays, plus the cost of any vehicle rental costs or other out-of-pocket costs. Grantee agrees to reimburse Grantor (within ninety(90) days after receipt of a bill therefor) for all other costs and expenses incurred by Grantor in connection with Grantee's use of the Premises or the presence, construction, maintenance, and use of the Improvements situated thereon.

6.8 No Unauthorized Tests or Digging. Grantee, and Grantee's Contractors, must not conduct any tests, investigations or any other activity using mechanized equipment and/or machinery, or place or store any mechanized equipment, tools or other materials, within twenty-five (25) feet of the centerline of any railroad track on Grantor's rail corridor or property (whether or not such centerline is located within the Premises), except after Grantee has obtained written approval from Grantor, and then only in strict accordance with the terms and any conditions of such approval.

6.9 Boring. Prior to conducting any boring work on or near Grantor's rail corridor or property (which shall only be permitted within the Premises), Grantee and Grantee's Contractors shall explore the proposed location for such work with hand tools to a depth of at least three (3) feet below the surface of the ground to determine whether pipelines or other structures exist below the surface, provided, however, that in lieu of the foregoing, Grantee shall have the right to use suitable detection equipment or other generally accepted industry practice (e.g., consulting with the Underground Services Association) to determine the existence or location of pipelines and other subsurface structures prior to drilling or excavating with mechanized equipment. Upon Grantee's written request, which shall be made thirty (30) business days in advance of Grantee's proposed construction or modification of Improvements, Grantor will provide to Grantee any information that Grantor has in the possession of its Engineering Department concerning the existence and approximate location of Grantor's underground utilities and pipelines at or near the vicinity of the proposed Improvements. Prior to conducting any

boring work, Grantee, and Grantee's Contractors, shall review all such material. Grantor does not warrant the accuracy or completeness of information relating to subsurface conditions and Grantee's, and Grantee's Contractors', operations at all times shall be subject to the liability provisions set forth herein. For all bores greater than 20 inches in diameter and at a depth less than ten (10) feet below the bottom of a rail, Grantee, and Grantee's Contractors, shall perform a soil investigation which must be reviewed by Grantor prior to construction. This study is to determine if granular material is present, and to prevent subsidence during the installation process. If the investigation determines in Grantor's reasonable opinion that granular material is present, Grantor may select a new location for Grantee's use, or may require Grantee, and Grantee's Contractors, to furnish for Grantor's review and approval, in Grantor's sole discretion, a remedial plan to deal with the granular material. Once Grantor has approved any such remedial plan in writing, Grantee, and Grantee's Contractors, at Grantee's sole cost, shall carry out the approved plan in accordance with all terms thereof and hereof. Any open hole, boring or well constructed on the Premises by Grantee, or Grantee's Contractors, shall be safely covered and secured at all times when anyone who is not creating it, working in it or using it as permitted hereunder is present in the actual vicinity thereof. Following completion of that portion of the work, all holes or borings constructed on the Premises shall be promptly filled in by Grantee and Grantee's Contractors to surrounding ground level with compacted bentonite grout, or otherwise secured or retired in accordance with any applicable Laws. No excavated materials may remain on Grantor's rail corridor or property for more than ten (10) days, and must be properly disposed of by Grantee and Grantee's Contractors in accordance with applicable Laws.

6.10 Drainage of Premises and Property. Any and all cuts and fills, excavations or embankments necessary in the construction, maintenance, or future alteration of the Premises shall be made and maintained by Grantee in such manner, form and to the extent as will provide adequate drainage of and from the Premises and Grantor's adjoining right of way; and wherever any such fill or embankment shall or may obstruct the natural and pre-existing drainage from the Property and Grantor's adjoining right of way, Grantee shall construct and maintain such culverts or drains within the Premises as may be requisite to preserve such natural and pre-existing drainage. Grantee shall wherever necessary, construct extensions of existing drains, culverts or ditches through or along the Premises, such extensions to be of adequate sectional dimensions to preserve flowage of drainage or other waters, and/or material and workmanship equally as good as those now existing.

6.11 Modification, Relocation or Removal of Improvements. If at any time, Grantor desires the use of its rail corridor in such a manner that, in Grantor's reasonable opinion, would be interfered with by any portion of the Improvements or the Easement, Grantee, at Grantee's sole cost, shall make such changes in the Improvements and/or Premises that, in the sole discretion of Grantor, are necessary to avoid interference with the proposed use of Grantor's property, including, without limitation, Grantee relocating or removing all or a portion of the Improvements from the Premises. Grantor acknowledges that, in some instances, Improvements will not need to be moved or removed from the Premises, but can be protected in place, subject to approval by Grantor's engineering department. Where it is practicable to do so, Grantor shall provide to Grantee at least one hundred twenty (120) days prior written notice that Improvements must be modified, removed or relocated, and in circumstances where one hundred twenty (120) days notice is not practicable, Grantor shall provide to Grantee as much notice as it reasonably can, and in no case less than twenty (20) days prior written notice. Grantee shall ensure that all Improvements are modified, removed or relocated as required on or before the date set forth in Grantor's written notice.

## **Section 7 Indemnification.**

**7.1 TO THE FULLEST EXTENT PERMITTED BY LAW, GRANTEE SHALL CAUSE GRANTEE'S CONTRACTORS AND SUBCONTRACTORS TO, RELEASE, INDEMNIFY, DEFEND AND HOLD HARMLESS GRANTOR AND GRANTOR'S AFFILIATED COMPANIES, PARTNERS, SUCCESSORS, ASSIGNS, LEGAL REPRESENTATIVES, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES AND AGENTS (COLLECTIVELY, "INDEMNITEES") FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LIABILITIES, FINES, PENALTIES, COSTS, DAMAGES, LOSSES, LIENS, CAUSES OF ACTION, SUITS, DEMANDS, JUDGMENTS AND EXPENSES (INCLUDING, WITHOUT LIMITATION, COURT COSTS, ATTORNEYS' FEES AND COSTS OF INVESTIGATION, REMOVAL AND REMEDIATION AND GOVERNMENTAL OVERSIGHT COSTS) ENVIRONMENTAL OR OTHERWISE (COLLECTIVELY, "LIABILITIES") OF ANY NATURE, KIND**

OR DESCRIPTION OF ANY PERSON OR ENTITY DIRECTLY OR INDIRECTLY ARISING OUT OF, RESULTING FROM OR RELATED TO (IN WHOLE OR IN PART):

- (i) THIS EASEMENT AGREEMENT, INCLUDING, WITHOUT LIMITATION, ITS ENVIRONMENTAL PROVISIONS,
- (ii) ANY RIGHTS OR INTERESTS GRANTED PURSUANT TO THIS EASEMENT AGREEMENT,
- (iii) OCCUPATION AND USE OF THE PREMISES BY GRANTEE OR GRANTEE'S CONTRACTORS, SUBCONTRACTORS, AGENTS, INVITEES, LESSEES OR LICENSEES, OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE THEY CONTROL OR EXERCISE CONTROL OVER (INDIVIDUALLY, A "GRANTEE PARTY," AND COLLECTIVELY, "GRANTEE PARTIES"),
- (iv) THE ENVIRONMENTAL CONDITION AND STATUS OF THE PREMISES CAUSED BY OR CONTRIBUTED TO BY GRANTEE PARTIES, OR
- (v) ANY ACT OR OMISSION OF GRANTEE PARTIES,

EVEN IF SUCH LIABILITIES ARISE FROM OR ARE ATTRIBUTED TO ANY NEGLIGENCE OF ANY INDEMNITEE. THE ONLY LIABILITIES WITH RESPECT TO WHICH GRANTEE'S CONTRACTORS AND SUBCONTRACTORS ARE NOT REQUIRED TO INDEMNIFY AN INDEMNITEE ARE LIABILITIES (1) TO THE EXTENT THAT THEY ARE PROXIMATELY CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THAT INDEMNITEE, OR (2) THAT ARE WHOLLY CAUSED BY THE SOLE NEGLIGENCE OF THAT INDEMNITEE.

7.2 GRANTEE SHALL CAUSE GRANTEE'S CONTRACTORS AND SUBCONTRACTORS TO NOW AND FOREVER WAIVE ANY AND ALL CLAIMS, REGARDLESS WHETHER BASED ON STRICT LIABILITY, NEGLIGENCE OR OTHERWISE, THAT GRANTOR IS AN "OWNER", "OPERATOR", "ARRANGER", OR "TRANSPORTER" WITH RESPECT TO THE IMPROVEMENTS FOR THE PURPOSES OF CERCLA OR OTHER ENVIRONMENTAL LAWS. NOTWITHSTANDING THE LIMITATION IN SECTION 7.1, GRANTEE'S CONTRACTORS AND SUBCONTRACTORS SHALL INDEMNIFY, DEFEND AND HOLD THE INDEMNITEES HARMLESS FROM ANY AND ALL SUCH CLAIMS REGARDLESS OF THE NEGLIGENCE OF THE INDEMNITEES. GRANTEE FURTHER AGREES THAT THE USE OF THE PREMISES AS CONTEMPLATED BY THIS EASEMENT AGREEMENT SHALL NOT IN ANY WAY SUBJECT GRANTOR TO CLAIMS THAT GRANTOR IS OTHER THAN A COMMON CARRIER FOR PURPOSES OF ENVIRONMENTAL LAWS, AND GRANTEE'S CONTRACTORS AND SUBCONTRACTORS SHALL INDEMNIFY, DEFEND, AND HOLD THE INDEMNITEES HARMLESS FROM ANY AND ALL SUCH CLAIMS.

7.3 GRANTEE SHALL CAUSE ITS CONTRACTORS AND SUBCONTRACTORS, REGARDLESS OF ANY NEGLIGENCE OR ALLEGED NEGLIGENCE OF ANY INDEMNITEE, TO INDEMNIFY AND HOLD HARMLESS THE INDEMNITEES AGAINST, AND ASSUME THE DEFENSE OF, ANY LIABILITIES ASSERTED AGAINST OR SUFFERED BY ANY INDEMNITEE UNDER OR RELATED TO THE FEDERAL EMPLOYERS' LIABILITY ACT ("FELA") WHENEVER EMPLOYEES OF GRANTEE OR ANY OF ITS AGENTS, INVITEES, CONTRACTORS OR SUBCONTRACTORS CLAIM OR ALLEGE THAT THEY ARE EMPLOYEES OF ANY INDEMNITEE OR OTHERWISE. THIS INDEMNITY SHALL ALSO EXTEND, ON THE SAME BASIS, TO FELA CLAIMS BASED ON ACTUAL OR ALLEGED VIOLATIONS OF ANY FEDERAL, STATE OR LOCAL LAWS OR REGULATIONS, INCLUDING BUT NOT LIMITED TO THE SAFETY APPLIANCE ACT, THE BOILER INSPECTION ACT, THE OCCUPATIONAL HEALTH AND SAFETY ACT, THE RESOURCE CONSERVATION AND RECOVERY ACT, AND ANY SIMILAR STATE OR FEDERAL STATUTE.

7.4 Upon written notice from Grantor, Grantee's Contractors agree to assume the defense of any lawsuit or other proceeding brought against any Indemnitee by any entity, relating to any matter covered by this Easement Agreement for which Grantee's Contractors have an obligation to assume liability for and/or save and

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hold harmless any Indemnitee. Grantee's Contractors shall pay all costs incident to such defense, including, but not limited to, attorneys' fees, investigators' fees, litigation and appeal expenses, settlement payments, and amounts paid in satisfaction of judgments. It is understood by the parties that Grantee will have no direct contract with its contractors' subcontractors and that Grantee shall be deemed to be in compliance with this Section 7 by requiring by contract that Grantee's Contractors require that each of their subcontractors comply with the terms of this Section 7 and Section 8 hereof.

**Section 8     Insurance.** Insurance terms shall be as specified in the Construction and Maintenance Agreement referenced in Section 1.1.

**Section 9     Environmental.**

9.1     Compliance with Environmental Laws. Grantee shall strictly comply with all federal, state and local environmental Laws in its use of the Premises, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Toxic Substances Control Act (collectively referred to as the "**Environmental Laws**"). Grantee shall not maintain a "treatment," "storage," "transfer" or "disposal" facility, or "underground storage tank," as those terms are defined by Environmental Laws, on the Premises. Grantee shall not handle, transport, release or suffer the release of "hazardous waste" or "hazardous substances", as "hazardous waste" and "hazardous substances" may now or in the future be defined by any Environmental Laws.

9.2     Notice of Release. Grantee shall give Grantor immediate notice to Grantor's Resource Operations Center at (800) 832-5452 of any release of hazardous substances on or from the Premises, violation of Environmental Laws, or inspection or inquiry by governmental authorities charged with enforcing Environmental Laws with respect to Grantee's use of the Premises. Grantee shall use its best efforts to promptly respond to any release on or from the Premises. Grantee also shall give Grantor immediate notice of all measures undertaken on behalf of Grantee to investigate, remediate, respond to or otherwise cure such release or violation.

9.3     Remediation of Release. In the event that Grantor has notice from Grantee or otherwise of a release or violation of Environmental Laws which occurred or may occur during the term of this Easement Agreement, and was caused, contributed to, aggravated or made more dangerous by the actions or inaction of Grantee or one of its contractors, subcontractors, agents, lessees, licensees or invitees, Grantor may require Grantee, at Grantee's sole risk and expense, to take timely measures to investigate, remediate, respond to or otherwise cure such release or violation affecting the Premises. If during the construction or subsequent maintenance of the Improvements, soils or other materials considered to be environmentally contaminated are exposed, Grantee will remove and safely dispose of said contaminated soils. Determination of soils contamination and applicable disposal procedures thereof, will be made only by an agency having the capacity and authority to make such a determination.

9.4     Preventative Measures. Grantee shall promptly report to Grantor in writing any conditions or activities upon the Premises known to Grantee which create a risk of harm to persons, property or the environment and shall take whatever action is necessary to prevent injury to persons or property arising out of such conditions or activities; provided, however, that Grantee's reporting to Grantor shall not relieve Grantee of any obligation whatsoever imposed on it by this Easement Agreement. Grantee shall promptly respond to Grantor's request for information regarding said conditions or activities.

9.5     Evidence of Compliance. Grantee agrees to furnish to Grantor, upon receiving a written request from Grantor, proof satisfactory to Grantor that Grantee is in compliance with this **Section 9**. Should Grantee not comply fully with the above-stated obligations of this **Section 9**, or correct any noncompliance within thirty (30) days of its receipt of information concerning such noncompliance, then, notwithstanding anything contained in any other provision hereof, Grantor, at its option, may terminate this Easement Agreement by serving thirty (30) days' notice of termination upon Grantee. Upon termination, Grantee shall remove the Improvements and restore the Premises as provided in **Section 12**.

**Section 10 PERSONAL PROPERTY WAIVER. ALL PERSONAL PROPERTY, INCLUDING, BUT NOT LIMITED TO, FIXTURES, EQUIPMENT, OR RELATED MATERIALS UPON THE PREMISES WILL BE AT THE RISK OF GRANTEE ONLY, AND NO INDEMNITEE WILL BE LIABLE FOR ANY DAMAGE THERETO OR THEFT THEREOF, WHETHER OR NOT DUE IN WHOLE OR IN PART TO THE NEGLIGENCE OF ANY INDEMNITEE.**

**Section 11 Default and Termination.**

11.1 Grantor's Performance Rights. If at any time Grantee, or Grantee's Contractors, fails to properly perform its obligations under this Easement Agreement, Grantor, in its sole discretion, may: (i) seek specific performance of the unperformed obligations, or (ii) at Grantee's sole cost, may arrange for the performance of such work as Grantor deems necessary for the safety of its rail operations, activities and property, or to avoid or remove any interference with the activities or property of Grantor, or anyone or anything present on the rail corridor or property with the authority or permission of Grantor. Grantee shall promptly reimburse Grantor for all costs of work performed on Grantee's behalf upon receipt of an invoice for such costs. Grantor's failure to perform any obligations of Grantee or Grantee's Contractors shall not alter the liability allocation set forth in this Easement Agreement.

11.2 Grantor's Termination Rights. Grantor may, at its option, terminate this Easement Agreement by serving five (5) days' notice in writing upon Grantee: (i) if default shall be made in any of the covenants or agreements of Grantee contained in this Easement Agreement, (ii) in case of any assignment or transfer of the Easement by operation of law, or (iii) if Grantee should abandon or cease to use the Premises for the Easement Purpose. Any waiver by Grantor of any default or defaults shall not constitute a waiver of the right to terminate this Easement Agreement for any subsequent default or defaults, nor shall any such waiver in any way affect Grantor's ability to enforce any section of this Easement Agreement.

11.3 Effect of Termination or Expiration. Neither termination nor expiration will release Grantee from any obligation under this Easement Agreement resulting from any acts, omissions or events happening prior to the date of termination or expiration, or, if later, the date the Premises are restored as required by **Section 12.**

11.4 Non-exclusive Remedies. The remedies set forth in this **Section 11** shall be in addition to, and not in limitation of, any other remedies that Grantor may have at law or in equity.

**Section 12 Surrender of Premises.**

12.1 Removal of Improvements and Restoration. This Easement shall terminate if it is not used for the Easement Purpose for a period of one year. Upon termination of this Easement Agreement, whether by abandonment of the Easement or by the exercise of Grantor's termination rights hereunder, Grantee shall, at its sole cost and expense, immediately perform the following:

- (a) remove all or such portion of Grantee's Improvements and all appurtenances thereto from the Premises, as Grantor directs at Grantor's sole discretion;
- (b) repair and restore any damage to the Premises arising from, growing out of, or connected with Grantee's use of the Premises;
- (c) remedy any unsafe conditions on the Premises created or aggravated by Grantee; and
- (d) leave the Premises in the condition which existed as of the Effective Date.

12.2 Limited License for Entry. If this Easement Agreement is terminated, Grantor may direct Grantee to undertake one or more of the actions set forth above, at Grantee's sole cost, in which case Grantee shall have a limited license to enter upon the Premises to the extent necessary to undertake the actions directed by Grantor. The terms of this limited license include all of Grantee's obligations under this Easement Agreement. Termination will not release Grantee from any obligation under this Easement Agreement resulting

from any acts, omissions or events happening prior to the date of termination, or, if later, the date when Grantee's Improvements are removed and the Premises are restored to the condition that existed as of the Effective Date. If Grantee fails to surrender the Premises to Grantor upon any termination of the Easement, all obligations of Grantee hereunder shall continue in effect until the Premises are surrendered.

**Section 13** Liens. Grantee shall promptly pay and discharge any and all liens arising out of any construction, alterations or repairs done, suffered or permitted to be done by Grantee on the Premises or attributable to Taxes that are the responsibility of Grantee pursuant to **Section 6**. Grantor is hereby authorized to post any notices or take any other action upon or with respect to the Premises that is or may be permitted by Law to prevent the attachment of any such liens to any portion of the Premises; provided, however, that failure of Grantor to take any such action shall not relieve Grantee of any obligation or liability under this **Section 13** or any other section of this Easement Agreement.

**Section 14** Tax Exchange. Grantor reserves the right to assign this Easement Agreement to Apex Property & Track Exchange, Inc. ("**Apex**"). Apex is a qualified intermediary within the meaning of Section 1031 of the Internal Revenue Code of 1986, as amended, and Treas. Reg. § 1.1031(k)-1(g), for the purpose of completing a tax-deferred exchange under said Section 1031. Grantor shall bear all expenses associated with the use of Apex, or necessary to qualify this transaction as a tax-deferred exchange, and, except as otherwise provided herein, shall protect, reimburse, indemnify and hold harmless Grantee from and against any and all reasonable and necessary additional costs, expenses, including, attorneys fees, and liabilities which Grantee may incur as a result of Grantor's use of Apex or the qualification of this transaction as a tax-deferred transaction pursuant to Section 1031. Grantee shall cooperate with Grantor with respect to this tax-deferred exchange, and upon Grantor's request, shall execute such documents as may be required to effect this tax-deferred exchange.

**Section 15** Notices. Any notice required or permitted to be given hereunder by one party to the other shall be in writing and the same shall be given and shall be deemed to have been served and given if (i) placed in the United States mail, certified, return receipt requested, or (ii) deposited into the custody of a nationally recognized overnight delivery service, addressed to the party to be notified at the address for such party specified below, or to such other address as the party to be notified may designate by giving the other party no less than thirty (30) days' advance written notice of such change in address.

If to Grantor:                   BNSF Railway Company  
2500 Lou Menk Dr. – AOB3  
Fort Worth, Texas 76131  
Attn:    Director of Real Estate

With a copy to:                   BNSF Railway Company  
2500 Lou Menk Drive  
Fort Worth, Texas 76131  
Attention: \_\_\_\_\_

If to Grantee:                   North Dakota Department of Transportation  
608 East Boulevard Avenue  
Bismarck, North Dakota 58505-0700  
Attn: Environmental and Transportation Services Division

**Section 16** Recordation. It is understood and agreed that this Easement Agreement shall not be in recordable form and shall not be placed on public record and any such recording shall be a breach of this Easement Agreement. Grantor and Grantee shall execute a Memorandum of Easement in the form attached hereto as **Exhibit "C"** (the "**Memorandum of Easement**") subject to changes required, if any, to conform such form to local recording requirements. The Memorandum of Easement shall be recorded in the real estate records in the county where the Premises are located. If a Memorandum of Easement is not executed by the parties and recorded as described above within 90 days of the Effective Date, Grantor shall have the right to terminate this Easement Agreement upon notice to Grantee.

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**Section 17 Miscellaneous.**

17.1 All questions concerning the interpretation or application of provisions of this Easement Agreement shall be decided according to the substantive Laws of the State of North Dakota without regard to conflicts of law provisions.

17.2 In the event that Grantee consists of two or more parties, all the covenants and agreements of Grantee herein contained shall be the joint and several covenants and agreements of such parties. This instrument and all of the terms, covenants and provisions hereof shall inure to the benefit of and be binding upon each of the parties hereto and their respective legal representatives, successors and assigns and shall run with and be binding upon the Premises.

17.3 If any action at law or in equity is necessary to enforce or interpret the terms of this Easement Agreement, the prevailing party or parties shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party or parties may be entitled.

17.4 If any provision of this Easement Agreement is held to be illegal, invalid or unenforceable under present or future Laws, such provision will be fully severable and this Easement Agreement will be construed and enforced as if such illegal, invalid or unenforceable provision is not a part hereof, and the remaining provisions hereof will remain in full force and effect. In lieu of any illegal, invalid or unenforceable provision herein, there will be added automatically as a part of this Easement Agreement a provision as similar in its terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

17.5 This Easement Agreement is the full and complete agreement between Grantor and Grantee with respect to all matters relating to Grantee's use of the Premises, and supersedes any and all other agreements between the parties hereto relating to Grantee's use of the Premises as described herein. However, nothing herein is intended to terminate any surviving obligation of Grantee.

17.6 Time is of the essence for the performance of this Easement Agreement.

Witness the execution of this Easement Agreement as of the date first set forth above.

**GRANTOR:**

BNSF RAILWAY COMPANY, a Delaware corporation

By: *[Signature]*  
Name: KURT GERINGER  
Title: General Director Real Estate

**GRANTEE:**

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

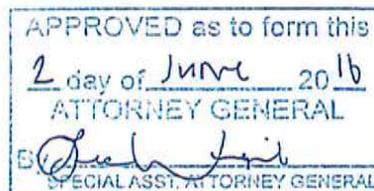
By: Grant Levi  
Name: *[Signature]*  
Title: Director

Approved as to substance by:

MARK S. GAYDOS, P.E. - ENV. & TRAN.  
SERVICES  
Division Director (typed or printed)

*[Signature]*  
Signature

6/2/16  
Date



**EXHIBIT "A"**

**Premises**

NDDOT PROJECT: NHU-3-020(074)103 – RAMSEY COUNTY

**Parcel Number 4-3 (Permanent Easement)**

A portion of the Main Track & Branch Line Located in Parts of the S 1/2 of Section 34, Township 154 N, Range 64 W, of the 5th Principal Meridian, County of Ramsey, State of North Dakota, described as follows and as shown on plat 4 of 6:

Commencing at the S 1/4 corner of section 34, thence northerly along the 1/4 line of section 34, N 01 deg. 18 min. 32 sec. W a distance of 1632.01 feet. Thence N 88 deg. 41 min. 28 sec. E a distance of 45.57 feet to the point of beginning which is a point on the existing right of way line of ND 20. Thence in a counter clockwise direction, S 48 deg. 55 min. 32 sec. E along said existing right of way line of ND 20 a distance of 67.67 feet. Thence N 01 deg. 17 min. 12 sec. W a distance of 45.71 feet. Thence N 48 deg. 48 min. 20 sec. W a distance of 67.80 feet to a point on the existing right of way line of ND 20. Thence S 01 deg. 17 min. 12 sec. E along said existing right of way line of ND 20 a distance of 45.90 feet to the point of beginning.

Said parcel is shown on the plat as parcel 4-3 and contains 2,290 SF more or less, and is subject to any easements or rights of way previously acquired.

END OF DESCRIPTION.

The legal description was prepared by James Nelson and reviewed by Brian R. Heath, KLJ, PO Box 937, 1010 4th Avenue SW, Valley City, North Dakota 58072-0937.

**Parcel Number 4-4 (Permanent Easement)**

A portion of the Main Track & Branch Line Located in Parts of the S 1/2 of Section 34, Township 154 N, Range 64 W, of the 5th Principal Meridian, County of Ramsey, State of North Dakota, described as follows and as shown on plat 4 of 6:

Commencing at the S 1/4 corner of section 34, thence northerly along the 1/4 line of section 34, N 01 deg. 18 min. 32 sec. W a distance of 1669.83 feet. Thence S 88 deg. 41 min. 28 sec. W a distance of 54.51 feet to the point of beginning which is a point on the existing right of way line of ND 20. Thence S 88 deg. 42 min. 48 sec. W a distance of 45.00 feet. Thence N 01 deg. 17 min. 12 sec. W a distance of 106.00 feet. Thence N 88 deg. 42 min. 48 sec. E a distance of 45.00 feet to a point on the existing right of way line of ND 20. Thence S 01 deg. 17 min. 12 sec. E along said existing right of way line of ND 20 a distance of 106.00 feet to the point of beginning.

Said parcel is shown on the plat as parcel 4-4 and contains 4,770 SF more or less, and is subject to any easements or rights of way previously acquired.

END OF DESCRIPTION.

The legal description was prepared by James Nelson and reviewed by Brian R. Heath, KLJ, PO Box 937, 1010 4th Avenue SW, Valley City, North Dakota 58072-0937.

**EXHIBIT "B"**

**Temporary Premises**

NDDOT PROJECT: NHU-3-020(074)103 – RAMSEY COUNTY

**Parcel Number 4-2 (Temporary Construction Easement)**

A portion of the Main Track & Branch Line Located in Parts of the S 1/2 of Section 34, Township 154 N, Range 64 W, of the 5th Principal Meridian, County of Ramsey, State of North Dakota, described as follows and as shown on plat 4 and 4a of 6:

Commencing at the S 1/4 corner of section 34, thence northerly along the 1/4 line of section 34, N 01 deg. 18 min. 32 sec. W a distance of 1518.73 feet. Thence N 88 deg. 41 min. 28 sec. E a distance of 95.53 feet to the point of beginning, which is a point on the existing right of way line of ND 20. Thence N 01 deg. 17 min. 12 sec. W along said existing right of way line of ND 20 a distance of 113.38 feet. Thence S 55 deg. 42 min. 08 sec. E a distance of 29.54 feet. Thence S 49 deg. 01 min. 20 sec. E a distance of 507.79 feet. Thence S 48 deg. 18 min. 06 sec. E a distance of 254.89 feet. Thence S 41 deg. 11 min. 40 sec. W a distance of 8.50 feet. Thence S 48 deg. 18 min. 06 sec. E a distance of 120.79 feet. Thence S 48 deg. 51 min. 05 sec. E a distance of 124.08 feet. Thence S 38 deg. 04 min. 55 sec. W a distance of 95.29 feet to a point on a parallel line, which is the beginning of a 220 foot spiral curve ahead, concave to the left (southwesterly), which is 41 feet southwesterly of and parallel with the following described survey centerline of the west track of the Burlington Northern Santa Fe railroad: Thence northwesterly along said survey centerline and spiral curve a distance of 74.35 feet to the end of the parallel line, which is also a point on the existing right of way line of the Burlington Northern Santa Fe railroad. Thence N 48 deg. 49 min. 04 sec. W along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 282.07 feet. Thence N 48 deg. 54 min. 29 sec. W along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 200.04 feet. Thence N 45 deg. 47 min. 38 sec. W along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 92.70 feet. Thence N 40 deg. 51 min. 04 sec. W along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 134.55 feet. Thence N 48 deg. 55 min. 32 sec. W along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 184.22 feet to the point of beginning.

It is a condition of this easement that it shall not be filed for record and that all rights conveyed to the state of North Dakota and North Dakota Department of Transportation by this instrument shall terminate upon completion of construction of said project, or in five years from the date of conveyance, whichever comes first.

Said parcel is shown on the plat as parcel 4-2 and contains 101,155 SF more or less, and is subject to any easements or rights of way previously acquired.

END OF DESCRIPTION.

The legal description was prepared by James Nelson and reviewed by Brian R. Heath, KLJ, PO Box 937, 1010 4th Avenue SW, Valley City, North Dakota 58072-0937.

**Parcel Number 4A-2 (Temporary Construction Easement)**

A portion of the Main Track & Branch Line Located in Parts of the S 1/2 of Section 34, Township 154 N, Range 64 W, of the 5th Principal Meridian, County of Ramsey, State of North Dakota, described as follows and as shown on plat 4A of 6:

Commencing at the S 1/4 corner of section 34, thence northerly along the 1/4 line of section 34, N 01 deg. 18 min. 32 sec. W a distance of 853.27 feet. Thence N 88 deg. 41 min. 28 sec. E a distance of 795.24 feet to the point of beginning. Thence N 38 deg. 04 min. 55 sec. E a distance of 95.29 feet. Thence S 48

deg. 51 min. 05 sec. E a distance of 302.26 feet. Thence N 89 deg. 00 min. 46 sec. E a distance of 30.91 feet. Thence S 48 deg. 49 min. 05 sec. E a distance of 87.01 feet. Thence S 41 deg. 09 min. 05 sec. W a distance of 70.57 feet. Thence N 48 deg. 49 min. 05 sec. W a distance of 64.18 feet. Thence S 89 deg. 00 min. 46 sec. W a distance of 60.61 feet to a point on a parallel line, which is 41 feet southwesterly of and parallel with the following described survey centerline of the west track of the Burlington Northern Santa Fe railroad:

Thence N 48 deg. 50 min. 38 sec. W along said survey centerline a distance of 35.70 feet to the beginning of a 220 foot spiral curve back, concave to the left (southwesterly). Thence continuing northwesterly along said survey centerline and spiral curve a distance of 198.19 feet to the end of the parallel line. Thence S 40 deg. 45 min. 47 sec. W a distance of 7.70 feet to a point on the existing right of way line of the Burlington Northern Santa Fe railroad. Thence N 48 deg. 35 min. 00 sec. W along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 30.00 feet. Thence N 40 deg. 45 min. 47 sec. E a distance of 6.48 feet to a point on a non-tangent curve concave to the left (southwesterly) the radius point of which bears S 38 deg. 47 min. 02 sec. W a distance of 2823.93 feet. Thence northwesterly along said curve 34.60 feet through a central angle of 00 deg. 42 min. 07 sec. to the point of beginning.

It is a condition of this easement that it shall not be filed for record and that all rights conveyed to the state of North Dakota and North Dakota Department of Transportation by this instrument shall terminate upon completion of construction of said project, or in five years from the date of conveyance, whichever comes first.

Said parcel is shown on the plat as parcel 4A-2 and contains 36,091 SF more or less, and is subject to any easements or rights of way previously acquired.

END OF DESCRIPTION.

The legal description was prepared by James Nelson and reviewed by Brian R. Heath, KLJ, PO Box 937, 1010 4th Avenue SW, Valley City, North Dakota 58072-0937.

#### **Parcel Number 5-1 (Temporary Construction Easement)**

A portion of the Main Track & Branch Line Located in Parts of the S 1/2 of Section 34, Township 154 N, Range 64 W, of the 5th Principal Meridian, County of Ramsey, State of North Dakota, described as follows and as shown on plat 5 of 6:

Commencing at the S 1/4 corner of section 34, thence northerly along the 1/4 line of section 34, N 01 deg. 18 min. 32 sec. W a distance of 1677.91 feet. Thence N 88 deg. 41 min. 28 sec. E a distance of 45.59 feet to the point of beginning which is a point on the existing right of way line of ND 20. Thence N 01 deg. 17 min. 12 sec. W along said existing right of way line of ND 20 a distance of 55.59 feet. Thence N 48 deg. 55 min. 32 sec. W along said existing right of way line of ND 20 a distance of 8.12 feet. Thence N 41 deg. 06 min. 50 sec. E along said existing right of way line of ND 20 a distance of 8.90 feet. Thence N 01 deg. 17 min. 12 sec. W along said existing right of way line of ND 20 a distance of 21.80 feet to a point on the existing right of way line of the Burlington Northern Santa Fe railroad. Thence S 48 deg. 55 min. 32 sec. E along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 67.67 feet. Thence S 01 deg. 17 min. 12 sec. E a distance of 89.62 feet. Thence N 48 deg. 48 min. 20 sec. W a distance of 67.80 feet to the point of beginning.

It is a condition of this easement that it shall not be filed for record and that all rights conveyed to the state of North Dakota and North Dakota Department of Transportation by this instrument shall terminate upon completion of construction of said project, or in five years from the date of conveyance, whichever comes first.

Said parcel is shown on the plat as parcel 5-1 and contains 4,512 SF more or less, and is subject to any easements or rights of way previously acquired.

END OF DESCRIPTION.

The legal description was prepared by James Nelson and reviewed by Brian R. Heath, KLJ, PO Box 937, 1010 4th Avenue SW, Valley City, North Dakota 58072-0937.

**Parcel Number 5-2 (Temporary Construction Easement)**

A portion of the Main Track & Branch Line Located in Parts of the S 1/2 of Section 34, Township 154 N, Range 64 W, of the 5th Principal Meridian, County of Ramsey, State of North Dakota, described as follows and as shown on plat 5 of 6:

Commencing at the S 1/4 corner of section 34, thence northerly along the 1/4 line of section 34, N 01 deg. 18 min. 32 sec. W a distance of 1587.90 feet. Thence S 88 deg. 41 min. 28 sec. W a distance of 54.44 feet to the point of beginning which is a point on the existing right of way line of the Burlington Northern Santa Fe railroad. Thence N 48 deg. 55 min. 32 sec. W along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 89.32 feet. Thence S 41 deg. 04 min. 28 sec. W along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 12.10 feet. Thence S 88 deg. 57 min. 40 sec. W along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 84.11 feet. Thence N 48 deg. 55 min. 32 sec. W along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 17.61 feet. Thence N 41 deg. 04 min. 28 sec. E a distance of 41.38 feet. Thence N 49 deg. 01 min. 20 sec. W a distance of 44.64 feet. Thence N 40 deg. 58 min. 40 sec. E a distance of 10.00 feet. Thence N 49 deg. 01 min. 20 sec. W a distance of 254.13 feet. Thence N 40 deg. 58 min. 40 sec. E a distance of 10.00 feet. Thence N 49 deg. 01 min. 20 sec. W a distance of 401.53 feet. Thence N 09 deg. 46 min. 02 sec. W a distance of 38.95 feet. Thence N 32 deg. 55 min. 52 sec. W a distance of 50.81 feet to a point on a 220 foot spiral curve back, concave to the left (southwesterly), which is 30 feet southwesterly of and parallel with the following described survey centerline of the west track of the Burlington Northern Santa Fe railroad: Thence northwesterly along said survey centerline and spiral curve a distance of 198.07 feet to the beginning of the simple curve having a radius of 2864.93 feet. Thence continuing northwesterly along said survey centerline and simple curve 36.92 feet through a central angle of 00 deg. 44 min. 18 sec. to the beginning of a 220 foot spiral curve ahead, concave to the left (southwesterly). Thence continuing northwesterly along said survey centerline and spiral curve a distance of 220.00 feet to the end of the parallel line. Thence N 48 deg. 27 min. 30 sec. W a distance of 32.37 feet. Thence N 41 deg. 08 min. 38 sec. E a distance of 87.63 feet. Thence S 48 deg. 51 min. 22 sec. E a distance of 117.34 feet. Thence N 41 deg. 07 min. 58 sec. E a distance of 40.25 feet. Thence S 48 deg. 52 min. 02 sec. E a distance of 195.77 feet. Thence N 86 deg. 07 min. 58 sec. E a distance of 98.99 feet. Thence S 48 deg. 52 min. 02 sec. E a distance of 359.40 feet to a point on a non-tangent curve concave to the right (northeasterly) the radius point of which bears S 88 deg. 10 min. 04 sec. E a distance of 648.80 feet. Thence northerly along said curve 168.84 feet through a central angle of 14 deg. 54 min. 38 sec. to the end of the curve. Thence S 73 deg. 15 min. 26 sec. E a distance of 5.00 feet. Thence N 16 deg. 44 min. 34 sec. E a distance of 336.30 feet. Thence S 73 deg. 15 min. 26 sec. E a distance of 75.00 feet. Thence S 16 deg. 44 min. 34 sec. W a distance of 280.00 feet. Thence S 73 deg. 15 min. 26 sec. E a distance of 9.09 feet to a point on a non-tangent curve concave to the left (northeasterly) the radius point of which bears S 78 deg. 43 min. 27 sec. E a distance of 658.00 feet. Thence southerly along said curve 250.75 feet through a central angle of 21 deg. 50 min. 03 sec. to the end of the curve. Thence S 79 deg. 26 min. 30 sec. W a distance of 20.00 feet to a point on a non-tangent curve concave to the left (northeasterly) the radius point of which bears N 79 deg. 26 min. 30 sec. E a distance of 678.00 feet. Thence southeasterly along said curve 161.89 feet through a central angle of 13 deg. 40 min. 51 sec. to the end of the curve. Thence N 89 deg. 25 min. 03 sec. E a distance of 29.99 feet. Thence S 31 deg. 02 min. 56 sec. E a distance of 11.60 feet. Thence N 89 deg. 25 min. 03 sec. E a distance of 154.15 feet to a point on the existing right of way line of ND 20. Thence S 01 deg. 17 min. 12 sec. E along said existing right of way line of ND 20 a distance of 150.97 feet. Thence S 48 deg. 55 min. 32 sec. E along said existing right of way line of ND 20 a distance of 13.06 feet. Thence S 41 deg. 04 min. 28 sec. W along said existing right of way line of ND 20 a distance of 14.32 feet. Thence S 01 deg. 17 min. 12 sec. E along said existing right of way line of ND 20 a distance of 63.36 feet. Thence S 88 deg. 42 min. 48 sec. W a distance of 45.00 feet. Thence S 01 deg. 17 min. 12 sec. E a distance of 106.00 feet. Thence N 88 deg. 42 min. 48 sec. E a distance of 45.00 feet to a point on the existing right of way line of ND 20. Thence S 01 deg. 17 min. 12 sec. E along said

existing right of way line of ND 20 a distance of 81.93 feet to the point of beginning.

It is a condition of this easement that it shall not be filed for record and that all rights conveyed to the state of North Dakota and North Dakota Department of Transportation by this instrument shall terminate upon completion of construction of said project, or in five years from the date of conveyance, whichever comes first.

Said parcel is shown on the plat as parcel 5-2 and contains 332,511 SF more or less, and is subject to any easements or rights of way previously acquired.

END OF DESCRIPTION.

The legal description was prepared by James Nelson and reviewed by Brian R. Heath, KLJ, PO Box 937, 1010 4th Avenue SW, Valley City, North Dakota 58072-0937.

#### **Parcel Number 5A-2 (Temporary Construction Easement)**

A portion of the Main Track & Branch Line Located in Parts of the S 1/2 of Section 34, Township 154 N, Range 64 W, of the 5th Principal Meridian, County of Ramsey, State of North Dakota, described as follows and as shown on plat 5A of 6:

Commencing at the S 1/4 corner of section 34, thence northerly along the 1/4 line of section 34, N 01 deg. 18 min. 32 sec. W a distance of 1639.57 feet. Thence S 88 deg. 41 min. 28 sec. W a distance of 212.68 feet to a point on the existing right of way line of the Burlington Northern Santa Fe railroad. Thence N 48 deg. 55 min. 32 sec. W along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 974.08 feet to the point of beginning. Thence N 48 deg. 55 min. 32 sec. W continuing along said existing right of way line of the Burlington Northern Santa Fe railroad a distance of 71.81 feet. Thence N 33 deg. 34 min. 26 sec. E a distance of 5.34 feet. Thence S 69 deg. 07 min. 03 sec. E a distance of 270.87 feet. Thence S 32 deg. 55 min. 52 sec. E a distance of 50.81 feet. Thence N 69 deg. 07 min. 03 sec. W a distance of 245.66 feet to the point of beginning.

It is a condition of this easement that it shall not be filed for record and that all rights conveyed to the state of North Dakota and North Dakota Department of Transportation by this instrument shall terminate upon completion of construction of said project, or in five years from the date of conveyance, whichever comes first.

Said parcel is shown on the plat as parcel 5A-2 and contains 7,938 SF more or less, and is subject to any easements or rights of way previously acquired.

END OF DESCRIPTION.

The legal description was prepared by James Nelson and reviewed by Brian R. Heath, KLJ, PO Box 937, 1010 4th Avenue SW, Valley City, North Dakota 58072-0937.

Law Department Approved

**EXHIBIT "C"**

**Memorandum of Easement Following**

**Memorandum of Easement**

THIS MEMORANDUM OF EASEMENT is hereby executed this 16<sup>th</sup> day of July, 2016, by and between BNSF RAILWAY COMPANY, a Delaware corporation ("**Grantor**"), whose address for purposes of this instrument is 2500 Lou Menk Drive, Fort Worth, Texas 76131, and NORTH DAKOTA DEPARTMENT OF TRANSPORTATION ("**Grantee**"), whose address for purposes of this instrument is 608 EAST BOULEVARD AVENUE, BISMARCK, NORTH DAKOTA 58505-0700, which terms "Grantor" and "Grantee" shall include, wherever the context permits or requires, singular or plural, and the heirs, legal representatives, successors and assigns of the respective parties:

**WITNESSETH:**

**WHEREAS**, Grantor owns or controls certain real property situated in Ramsey County, NORTH DAKOTA as described on Exhibit "A" attached hereto and incorporated herein by reference (the "**Premises**");

**WHEREAS**, Grantor and Grantee entered into an Easement Agreement, dated July 16<sup>th</sup>, 2016 (the "**Easement Agreement**") which set forth, among other things, the terms of an easement granted by Grantor to Grantee over and across a portion of the Premises (the "**Easement**"); and

**WHEREAS**, Grantor and Grantee desire to memorialize the terms and conditions of the Easement Agreement of record.

For valuable consideration the receipt and sufficiency of which are hereby acknowledged, Grantor does grant unto Grantee and Grantee does hereby accept from Grantor the Easement over and across the Premises.

The term of the Permanent Easements, unless sooner terminated under provisions of the Easement Agreement, shall be perpetual. The term of the Temporary Easements, unless sooner terminated under provisions of this Easement Agreement, shall expire on the date that is three years after the Effective Date. Provisions regulating the use and purposes to which the Easement shall be limited, are set forth in detail in the Easement Agreement and Grantor and Grantee agree to abide by the terms of the Easement Agreement.

All the terms, conditions, provisions and covenants of the Easement Agreement are incorporated herein by this reference for all purposes as though written out at length herein, and both the Easement Agreement and this Memorandum of Easement shall be deemed to constitute a single instrument or document. This Memorandum of Easement is not intended to amend, modify, supplement, or supersede any of the provisions of the Easement Agreement and, to the extent there may be any conflict or inconsistency between the Easement Agreement or this Memorandum of Easement, the Easement Agreement shall control.

[Signature page follows]

IN WITNESS WHEREOF, Grantor and Grantee have executed this Memorandum of Easement to as of the date and year first above written.

**GRANTOR:**

BNSF RAILWAY COMPANY, a Delaware corporation

By:   
Name: KURT GERINGER  
Title: General Director Real Estate

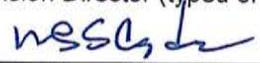
**GRANTEE:**

NORTH DAKOTA DEPARTMENT OF  
TRANSPORTATION

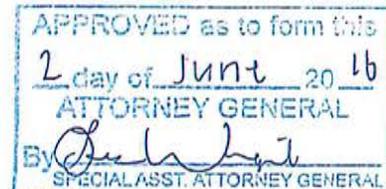
Grant Levi  
By:   
Name: Grant Levi  
Title: Director

Approved as to substance by:

MARK S. GAYDOS, P.E. - ENV. & TRANS.  
SERVICES  
Division Director (typed or printed)

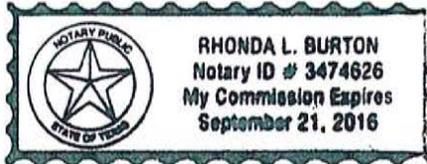
  
Signature

6/2/16  
Date



STATE OF Texas §  
COUNTY OF Tarrant §

This instrument was acknowledged before me on the 16<sup>th</sup> day of July, 2016, by Kurt  
Gringer (name) as General Director (title) of BNSF RAILWAY COMPANY, a  
Delaware corporation.



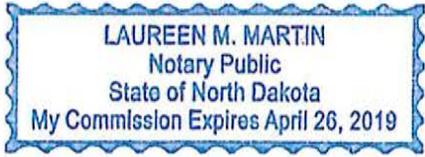
[Signature]  
Notary Public

(Seal)

My appointment expires: 9/21/2016

STATE OF North Dakota §  
COUNTY OF Burleigh §

This instrument was acknowledged before me on the 2 day of June, 2016, by  
Grant Lev (name) as Director (title) of  
NDDOT, a State agency.



[Signature]  
Notary Public

(Seal)

My appointment expires: 4/26/19

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NHU-3-020(074)103 / SU-3-982(031)035

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2	2	List of Standard Drawings	82	1 - 7	Survey Data Layout
4	1 - 5	Scope of Work	82	8 - 11	Intersection Grades
6	1 - 9	Notes	90	1 - 18	Paving Layouts
8	1 - 4	Estimate of Quantities	100	1 - 88	Workzone Traffic Control
10	1 - 2	Basis of Estimate & Earthwork Summary	110	1 - 3	Sign Summary
20	1 - 2	PCC Pavement & Joint Details	110	4 - 12	Signing Layout
20	3 - 7	ADA Ramp Details	110	13 - 15	Sign Details
20	8	Aggregate & Pavement Transition Detail & Subgrade Repair Detail	110	16	Special Assemblies
20	9	Inlet Protection Device	110	17	ND Highway Shield Details for Route Markers and Guide Signs
20	10	Edge Drain Detail	120	1 - 10	Pavement Marking Layout
20	11	Watermain	140	1 - 12	Lighting Sheets
20	12	Underdrain Details	150	1 - 20	Signal Sheets
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20	17 - 38	Retaining Wall	165	10	Access Roads & Stormwater Grading
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80	1	Fence Layout	200	62 - 161	Cross Sections - Railroad

**SPECIAL PROVISIONS**

Number	Description	Number	Description
SP 0003(14)	Temporary Erosion and Sediment Best Management Practices	SP 390(14)	Bridge Disc Bearings
SP 0004(14)	Federal Migratory Bird Treaty Act	SP 391(14)	Railroad Easement Requirements
SP 319(14)	Railroad Requirements		
SP 320(14)	Interconnect Cable		
SP 321(14)	Construction Requirements		
SP 328(14)	Painting Over Galvanized Steel		
SP 329(14)	Timber		
SP 339(14)	Waterproofing		
SP 373(14)	Work Zone Camera System		
SP 385(14)	Conditions of Contract Award		
SP 389(14)	Mass Concrete		

**NOTES**

Revised 9/29/16  
Revised 10/04/16

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NHU-3-019(044)155 NHU-3-020(074)103 SU-3-982(031)035	6	2

- 202-P03 REMOVAL OF PAVEMENT: Include the cost of the full depth vertical saw cuts adjacent to pavement removal areas, specified in Section 202.04 A "General", in the contract unit price for "Removal of Pavement".
- 202-P04 REMOVAL OF CURB & GUTTER: If Contractor operations require the removal of existing pavement and aggregate base adjacent to curb and gutter removals outside of the reconstruction limits, do not remove more than 3 feet of existing pavement adjacent to the curb & gutter. Include costs in the price bid for "Removal of Pavement".
- 203-010 SHRINKAGE: 25 percent additional volume is included for shrinkage in earth embankment.
- 203-385 AVERAGE HAUL: No average haul has been computed for this project.
- 203-P01 COMMON EXCAVATION-TYPE B: Perform excavation of the roadway subgrade with a tracked excavator using a smooth cutting edge to minimize disturbance to underlying soils. Construction equipment will not be allowed to travel over the subgrade. Place Geosynthetic Material Type G at the bottom of all subgrade excavations and backfill with Aggregate Base Course CL 5. Spread the aggregate with a tracked dozer. Do not scarify the bottom of the subgrade. A transitional slope of approximately 20:1 must be constructed prior to entering and on exiting different paving sections to avoid differential heave.  
  
All contours and cross sections represent the finished grade (top of the topsoil). In areas where topsoil is to be placed, complete the grading by cutting or filling earthwork to a point 6 inches below the final grade; with the topsoil bringing the grading template to finished grade elevations. Complete this work in the areas behind the curb and gutter, the inslopes and backslopes. Construct the earthwork to the lines and grades as shown on the plans.  
  
Dispose of any excess excavation off site. Provide copies of all agreements with property owners and governing agencies to the Engineer. Include all cost associated with disposal of the excess excavation in the unit price bid for "Common Excavation-Type B".
- 203-P02 COMMON EXCAVATION-SUBCUT: The Engineer will determine the location and actual quantity of "Common Excavation-Subcut". Delete the second paragraph of Standard Specification 203.04 C in its entirety.
- 251-P01 MOWING: If areas of seeding are completed and the turf becomes established, mow and maintain the seeded areas. Remove any clippings that land on locations other than the grassed area. Mow when grass is longer than 6" and/or as directed by the Engineer in the field. Include all cost for labor, equipment and materials necessary to complete the in the price bid for "Seeding Class I".
- 253-P01 HYDRAULIC MULCH: Delete section 253.04 B.2 of the Standard Specifications in its entirety.
- 302-115 BASE COURSE: Trim base course as specified in 302.04 C.2, "Surface Tolerance Type C."
- 302-P01 AGGREGATE BASE COURSE CL 5: Delete the first sentence of Standard Specification 302.03. The Contractor will not be allowed to substitute Salvaged Base Course in lieu of Aggregate Base Course CL 5.
- 302-P02 TRAFFIC SERVICE AGGREGATE: Temporary Service Aggregate has been provided for maintaining traffic and transitions throughout the construction phasing. Use the aggregate as directed by the Engineer in the field. Provide temporary service gravel that meets the requirements of Aggregate Base Course CL 5.

- 430-P01 COMMERCIAL GRADE HOT MIX ASPHALT: Provide commercial grade asphalt that meets the requirements of Superpave FAA 43 in Section 430.03 C, "Superpave Mix Properties". Meet the compaction requirements of Section 430.04 I.3 "Ordinary Compaction." Include the cost for the asphalt cement and tack required for the bituminous pavement in the unit price bid for "Commercial Grade Hot Mix Asphalt."
- 624-P01 RAILING: Paint the pedestrian railings after fabrication in accordance with SP 328(14). Use the paint color black, color no. 17038 of the Federal Standard No. 595B colors. Include all costs associated with fabrication, assembly, galvanizing, painting and installation of the railings in the unit price bid for "Pedestrian Railing".
- 704-100 TRAFFIC CONTROL SUPERVISOR: Provide a Traffic Control Supervisor.
- 704-200 PRECAST CONCRETE MEDIAN BARRIERS – STATE FURNISHED: Obtain 64 barriers from Devils Lake West Lot, 1905 Schwan Ave NW Devils Lake, ND 58301. Return barriers to Devils Lake West Lot.  
  
Some 4 inch x 4 inch boards are available at the return location. Provide any additional 4 inch x 4 inch boards necessary to stack barriers. The boards will become property of the Department. Include the cost for boards in the contract unit price for "Precast Concrete Median Barrier - State Furnished".
- 704-450 LANE CLOSURE - SIGNAL CONTROL/FLAGGING CONTROL: Install either the signal controlled lane closure on Standard D-704-16 or the flagging controlled lane closure on Standard D-704-17.  
  
Obtain an electrical source for traffic signals. Solar powered signals may be used. Place generators a minimum of 60 feet from the roadway centerline, unless the generator and signal are part of a trailer mounted unit.  
  
Place utility poles and equipment a minimum of 60 feet from the roadway centerline and place power conductors a minimum of 6 inches below the ground surface. Remove poles after they are no longer necessary.  
  
The Engineer will measure individual traffic control devices, other than the signal system and flaggers, shown on the standards. Payment will be made at the respective contract unit price.  
  
Include the cost of either a traffic signal system or flaggers in the contract unit price for "Lane Closure – Signal Control/Flagging Control".

704-P01 TEMPORARY TRAFFIC SIGNALS: Set the initial signal timing as shown below:

N-Bound	Green	Yellow	Red			
S-Bound	Red		Green	Yellow	Red	
Time (sec)	30	3	15	30	3	15

Calibrate initial timing plans to actual traffic behavior. This may require adjustments during peak traffic periods. Notify the Engineer upon operation of the system and for approval of any signal timing adjustments.

Cover the traffic and pedestrian heads for the traffic signals at the intersection on 6th Street NE and ND HWY 20 and take the signals out of service when the temporary signals are in use.

- 704-P02 TRAFFIC CONTROL: The Contractor will be allowed to submit alternative traffic control plans for consideration by NDDOT and the City of Devils Lake, and if found acceptable by NDDOT and the City of Devils Lake may be used in lieu of the proposed traffic control plan.

This document was originally issued and sealed by Chad A. Petersen Registration Number PE- 4884, on 10/04/16 and the original document is stored at the North Dakota Department of Transportation

**NOTES**

Revised 9/29/16  
Revised 10/06/16

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NHU-3-019(044)155 NHU-3-020(074)103 SU-3-982(031)035	6	4

during closure. Construct storm drain, subgrade and aggregate base. Move pedestrian traffic from the east to the west side of ND Hwy 20 as construction operations dictate. Close Hwy 20 for a maximum of 28 days.

Phase 7: ND Hwy 19 & ND Hwy 20: Close ND Hwy 20 between 3<sup>rd</sup> Street SE and 6<sup>th</sup> Street NE and close ND Hwy 19 west of 2<sup>nd</sup> Avenue NW to ND Hwy 20. Set up ND Hwy 20 detour route prior to closure. Maintain pedestrian traffic on ND Hwy 20 and ND Hwy 19 during the closure. Construct PCC paving, curb and gutter and sidewalk. Close ND Hwy 19 and ND Hwy 20 for a maximum of 28 days.

Phase 8: ND Hwy 20: Close 6<sup>th</sup> Street NE. Close the southbound lane at the intersection of ND Hwy 20 and 6<sup>th</sup> Street NE. Maintain one lane of traffic in the northbound lane of ND Hwy 20. Install temporary traffic signal. Close the sidewalk west of ND Hwy 20. Maintain Pedestrian traffic on the east side of ND Hwy 20. Construct temporary access to Proz Bar & Grill. Construct storm drain, subgrade, aggregate base, curb & gutter and PCC Paving. Construct Phase 8 in a maximum of 14 days.

Phase 9: 6<sup>th</sup> St NE: Close 6<sup>th</sup> Street NE. Close the northbound lane at the intersection of ND Hwy 20 and 6<sup>th</sup> Street NE. Maintain one lane of traffic in the southbound lane of ND Hwy 20. Install temporary traffic signal. Detour pedestrian traffic. Maintain temporary access to Proz Bar & Grill. Construct storm drain, subgrade, aggregate base, curb & gutter and PCC Paving. Close 6<sup>th</sup> Street NE for a maximum of 14 days.

The maximum number of traffic control devices required will be paid. No additional compensation will be made for relocation of devices. Asphalt millings may be used to construct temporary pedestrian ramps.

704-P04 TRAFFIC CONTROL: Leave the work area free of all hazards during non-working hours. Hazards include any type of obstruction, drop-offs greater than 2-inches, or steep embankment areas steeper than a 4:1 located within the clear zone. Fill with a temporary 4:1 slope, any drop-offs greater than 2-inches.

704-P05 STATE ROUTE MARKERS: Provide State Route Marker signs for temporary traffic control. State Route Markers may be either the old design or the new state outlined design; however, the all Route Marker signs provided must be of the same type.

Upon project completion, the State Route Marker sign panels will become property of the State. Stockpile sign panels within the project limits. The Engineer will arrange to have the stockpiled panels removed from the project limits.

Include the price of furnishing, installing, maintaining, stockpiling and other incidentals in the contract unit price of "Traffic Control Signs"

704-P06 TRAFFIC CONTROL: Traffic control device quantities are based on the list below. Provide additional devices at no additional cost to the Department.

1. Standard D-704-15; layout A and C
2. Standard D-704-20, layout G
3. Standard D-704-21, layout I
4. Standard D-704-22, layouts K and L
5. Standard D-704-23, layout Q
6. Standard D-704-25, layout V, W, and X
7. Standard D-704-26, layouts EE and FF

706-P01 AGGREGATE LABORATORY: Supply an Aggregate Laboratory with a printer/copy machine. The payment for these items will be included in the price bid for "Aggregate Laboratory".

714-P01 UNDERDRAINS: A system of two underdrain pipes are located from Sta. 5457+35 to 5459+35 as shown in the existing typical sections in Section 30. Replace the east underdrain and connect it to the existing manhole. Replace the west underdrain as shown in the proposed typical section in Section 30.

Install underdrain in accordance with the detail shown in Section 20 of the plans, located per the typical section in Section 30. Provide SDR 35 PVC underdrain. Include all costs associated with the work required to install the Underdrain, including but not limited to excavation, connections, pipe, labor, materials and equipment in the price bid for "Underdrain Pipe PVC Perforated 6IN".

714-P02 UNDERDRAIN CLEANOUT RISER: Include the costs for the labor, equipment and materials necessary to construct the wye, bend, riser, cap, gate valve top section, concrete slab in the price bid for "Underdrain Cleanout Riser".

714-P03 PLUG PIPE: At locations designated on the plans for plug and abandon pipe, blow the pipe full of sand or pump the pipe full of controlled density backfill to prevent any future collapse or failure of the abandoned pipe. Include all costs for labor, materials, and equipment necessary to perform this described work in the price bid for "Plug Pipe – All Types and Sizes".

722-100 INLETS AND MANHOLES: Inlets and manholes were designed with a minimum 4 foot riser height. Fill the bottom of each drainage structure with concrete, up to the lowest invert elevation.

722-P01 MANHOLE SANITARY: Include all labor, materials and equipment to install the new manhole base, external chimney seal, piping, rings, casting, and lid. Manufacture the base from precast, reinforced concrete no less than 8 inches thick. Payment will be per each, paid when installed.

Provide precast, reinforced concrete manholes conforming to the latest revisions of AASHTO M-199. Furnish manholes with a minimum of two, standard 2-inch thick adjusting rings and standard, OSHA approved manhole steps, spaced at 16-inches on center. Align all steps vertically in each manhole. Provide precast manholes with screw type lifting devices cast into the concrete section. Risers and covers shall be included in the price bid for "Manhole Riser \_IN".

Provide floating castings equal to Neenah R-1955-1, East Jordan 3025 SELFLEVEL or approved equal. The lids will be self-sealing and have a concealed pick bar. Label the lids SANITARY SEWER. Machine castings and lids to a uniform quality.

Set the manhole base at the proper grade and alignment to provide a smooth transition from the incoming pipes to the outgoing pipes. Bed the manhole base in 6" of 1 ¼" crushed rock to prevent settlement and provide support for the pipe from the manhole edge to the regular trench excavation. Provide a watertight connection between the manhole and the pipe. See Standard Drawing D-722-5 for details.

722-P02 MANHOLE CASTINGS: Install a floating casting on all new or existing manholes that lie within the limits of the new concrete roadway or sidewalk. Install an external chimney seal on all new or existing sanitary manholes located in the roadway. Provide floating castings equal to Neenah R-1955-1, East Jordan 3025 SELFLEVEL or approved equal. Where possible, position casting to avoid falling within a wheel path. Place all castings that lie in the roadway flush to within 1/8 inch below the pavement. Outfit the new manholes, adjusted manholes, or repaired manholes located outside of concrete with the standard casting (see Standard Drawing D-722-5). Include the cost for manhole castings in the price bid for "Manhole Sanitary", "Manhole \_IN", "Manhole Repair", and "Adjust Manhole".

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# Estimate of Quantities

Revised	9/29/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
Revised	10/05/16	ND	NHU-3-019(044)155	8	1
			NHU-3-020(074)103		
			SU-3-982(031)035		

SPEC	CODE	ITEM DESCRIPTION	UNIT	NHU-3-019(044)155 ND 19 (Participating)	NHU-3-019(044)155 ND 19 (Non-Participating)	NHU-3-020(074)103 ND 20 (Participating)	NHU-3-020(074)103 ND 20 (Non-Participating)	SU-3-982(031)035 Detour Route (Participating)	TOTAL
103	0100	CONTRACT BOND	L SUM	0.05	-	0.90	-	0.05	1.00
107	0100	RAILWAY PROTECTION INSURANCE	L SUM	-	-	1.00	-	-	1.00
201	0352	REMOVAL OF TREES & BRUSH	L SUM	-	-	1.00	-	-	1.00
201	0370	REMOVAL OF TREES 10IN	EA	-	-	12	-	-	12
201	0380	REMOVAL OF TREES 18IN	EA	-	-	2	-	-	2
202	0108	REMOVAL OF STRUCTURE-SITE 1	L SUM	-	-	1.00	-	-	1.00
202	0109	REMOVAL OF STRUCTURE-SITE 2	L SUM	-	-	1.00	-	-	1.00
202	0136	REMOVAL OF PAVEMENT	TON	2,220	39	8,944	-	-	11,203
202	0151	REMOVE PRECAST CONCRETE BARRIER	LF	-	-	50	-	-	50
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	575	-	714	-	-	1,289
202	0210	REMOVAL OF MANHOLES	EA	2	-	5	-	-	7
202	0230	REMOVAL OF INLETS	EA	4	-	12	-	-	16
203	0101	COMMON EXCAVATION-TYPE A	CY	-	-	13,480	-	-	13,480
203	0102	COMMON EXCAVATION-TYPE B	CY	645	-	4,545	-	-	5,190
203	0109	TOPSOIL	CY	188	-	4,899	-	-	5,087
203	0138	COMMON EXCAVATION-SUBCUT	CY	260	-	434	-	-	694
203	0140	BORROW-EXCAVATION	CY	-	-	3,580	-	-	3,580
210	0102	CLASS 1 EXCAVATION-SITE 1	L SUM	-	-	1.00	-	-	1.00
210	0103	CLASS 1 EXCAVATION-SITE 2	L SUM	-	-	1.00	-	-	1.00
210	0201	FOUNDATION PREPARATION	EA	-	-	2	-	-	2
210	0209	FOUNDATION FILL	TON	-	-	20,908	-	-	20,908
210	0210	FOUNDATION FILL	CY	-	-	84.3	-	-	84.3
216	0100	WATER	M GAL	126	-	901	-	-	1,027
251	0100	SEEDING CLASS I	ACRE	1.32	0.04	8.91	-	-	10.27
251	2000	TEMPORARY COVER CROP	ACRE	-	-	6.95	-	-	6.95
253	0201	HYDRAULIC MULCH	ACRE	1.32	0.04	15.86	-	-	17.22
255	0101	ECB TYPE 1	SY	-	-	4,230	-	-	4,230
255	0151	REMOVE ECB TYPE 1	SY	-	-	4,230	-	-	4,230
258	0100	CONCRETE SLOPE PROTECTION	SY	-	-	421.0	-	-	421.0
261	0112	FIBER ROLLS 12IN	LF	484	-	6,352	-	-	6,836
261	0113	REMOVE FIBER ROLLS 12IN	LF	484	-	6,352	-	-	6,836
302	0120	AGGREGATE BASE COURSE CL 5	TON	2,115	72	5,578	-	-	7,765
302	0314	TEMPORARY TRAFFIC SERVICE AGGREGATE	TON	60	-	1,268	-	-	1,328
411	0105	MILLING PAVEMENT SURFACE	SY	-	-	-	-	17,840	17,840
430	0500	COMMERCIAL GRADE HOT MIX ASPHALT	TON	48	3	1,000	-	1,982	3,033
550	0302	8.5IN NON-REINF CONCRETE PVMT CL AE-DOWELED	SY	2,569	-	7,809	-	-	10,378
602	0130	CLASS AAE-3 CONCRETE	CY	-	-	2,313.5	-	-	2,313.5
602	1134	PILE SUPPORTED APPROACH SLAB	SY	-	-	115.6	-	-	115.6
602	6001	PRECAST PIER CAP	EA	-	-	8	-	-	8
602	6002	PRECAST ABUTMENT	EA	-	-	4	-	-	4
602	6005	PRECAST CONCRETE WING WALL	EA	-	-	4	-	-	4

ND Highway 19 &  
ND Highway 20  
  
Estimate of Quantities

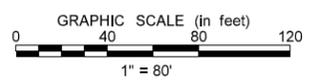
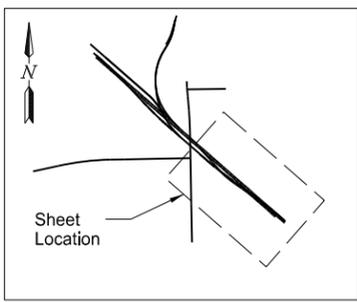
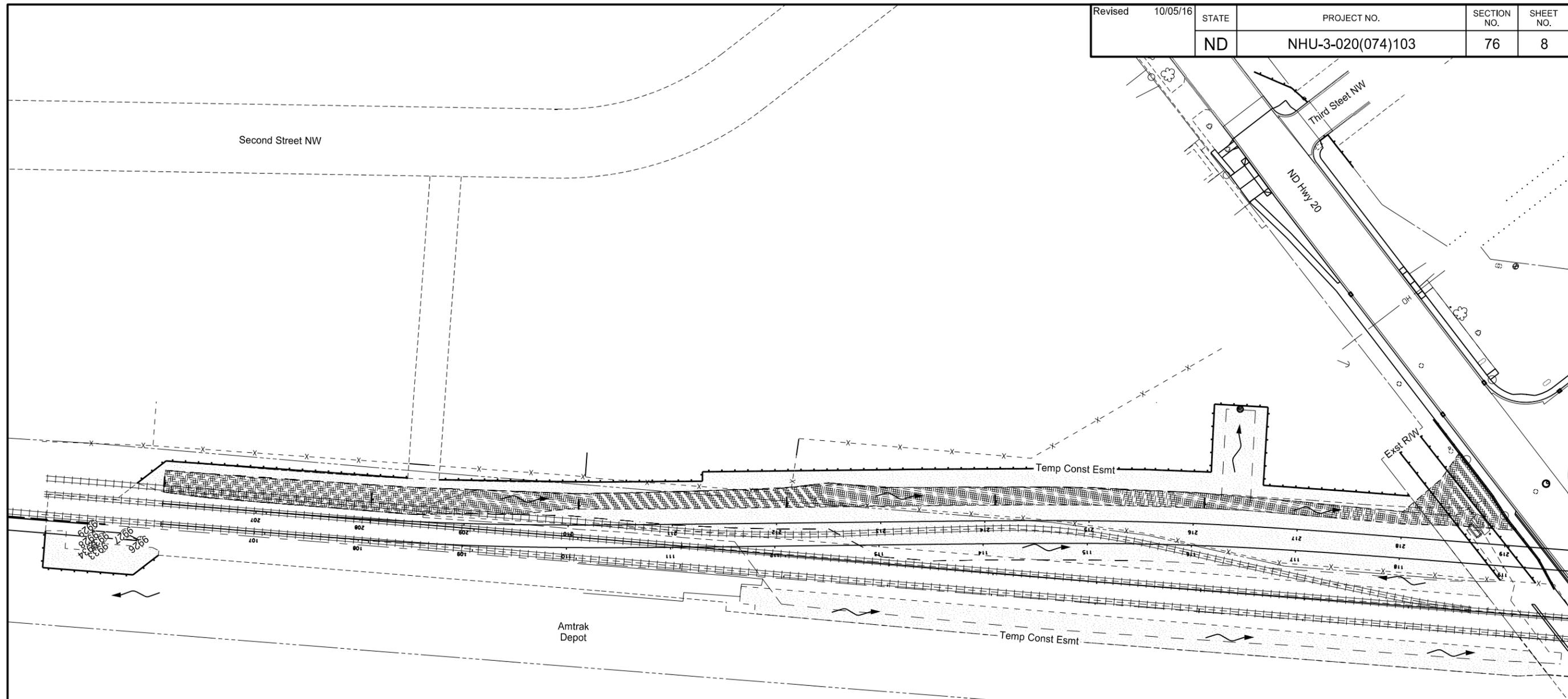
# Estimate of Quantities

Revised	9/29/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
Revised	10/05/16	ND	NHU-3-019(044)155	8	3
			NHU-3-020(074)103		
			SU-3-982(031)035		

SPEC	CODE	ITEM DESCRIPTION	UNIT	NHU-3-019(044)155 ND 19 (Participating)	NHU-3-019(044)155 ND 19 (Non-Participating)	NHU-3-020(074)103 ND 20 (Participating)	NHU-3-020(074)103 ND 20 (Non-Participating)	SU-3-982(031)035 Detour Route (Participating)	TOTAL
722	1120	MANHOLE RISER 72IN	LF	-	-	12.2	-	-	12.2
722	1130	MANHOLE RISER 84IN	LF	29.8	-	4.0	-	-	33.8
722	1140	MANHOLE RISER 96IN	LF	-	-	7.1	-	-	7.1
722	3410	MANHOLE REPAIR	EA	1	-	3	-	-	4
722	3510	INLET-TYPE 2	EA	5	-	19	-	-	24
722	3520	INLET-TYPE 2 DOUBLE	EA	-	-	4	-	-	4
722	3760	INLET SPECIAL-TYPE 160IN	EA	-	-	1	-	-	1
722	3910	INLET SLOTTED DRAIN 15IN	LF	-	-	10	-	-	10
722	3920	INLET SLOTTED DRAIN 18IN	LF	-	-	180	-	-	180
722	4020	INLET CATCH BASIN 9IN BEEHIVE	EA	-	-	2	-	-	2
722	6140	ADJUST GATE VALVE BOX	EA	3	-	3	-	7	13
722	6200	ADJUST MANHOLE	EA	3	-	5	-	12	20
722	6240	ADJUST UTILITY APPURTENANCE	EA	-	-	3	-	-	3
724	0420	HYDRANT-RELOCATE	EA	-	-	1	-	-	1
724	0611	WATER SERVICE LINE 1IN	LF	-	-	-	45	-	45
724	0892	RELOCATE WATERMAIN	EA	-	-	1	-	-	1
724	2120	36IN X 23IN ARCH SANITARY SEWER PIPE	LF	-	-	155	-	-	155
744	0100	POLYSTYRENE INSULATION BOARD	BD FT	-	-	10,422	-	-	10,422
748	0140	CURB & GUTTER-TYPE I	LF	1,002	24	2,886	-	-	3,912
748	0520	CURB-TYPE I	LF	-	-	155	-	-	155
750	0030	PIGMENTED IMPRINTED CONCRETE	SY	239	-	67	-	-	306
750	0100	SIDEWALK CONCRETE	SY	1,262	278	2,538	-	-	4,078
750	1000	DRIVEWAY CONCRETE	SY	88	-	-	-	-	88
750	1020	DRIVEWAY CONCRETE 8IN	SY	-	-	269	-	-	269
750	2115	DETECTABLE WARNING PANELS	SF	56	20	212	-	-	288
752	0600	FENCE CHAIN LINK	LF	-	-	2,180	-	-	2,180
752	0911	TEMPORARY SAFETY FENCE	LF	-	-	70	-	-	70
752	0922	FENCE REMOVE & RESET	LF	-	-	1,750	-	-	1,750
754	0110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	15.7	-	52.6	-	-	68.3
754	0112	FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	SF	47.6	-	225.0	-	-	272.6
754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	131.0	-	259.8	-	-	390.8
754	0592	RESET SIGN PANEL	EA	3	2	-	-	-	5
754	0593	RESET SIGN SUPPORT	EA	-	3	-	-	-	3
762	0103	PVMT MK PAINTED-MESSAGE	SF	-	-	-	-	161	161
762	0122	PREFORMED PATTERNED PVMT MK-MESSAGE(GROOVED)	SF	64	-	1,815	-	2,340	4,219
762	0420	SHORT TERM 4IN LINE-TYPE R	LF	4,058	-	26,580	-	-	30,638
762	0422	SHORT TERM 6IN LINE-TYPE R	LF	96	-	-	-	-	96
762	0424	SHORT TERM 8IN LINE-TYPE R	LF	-	-	546	-	-	546
762	0430	SHORT TERM 4IN LINE-TYPE NR	LF	1,338	-	1,818	-	6,634	9,790
762	0434	SHORT TERM 8IN LINE-TYPE NR	LF	-	-	-	-	768	768
762	0436	SHORT TERM 24IN LINE-TYPE NR	LF	-	-	-	-	84	84
762	0440	SHORT TERM MESSAGE-TYPE R	SF	-	-	68	-	-	68

ND Highway 19 &  
ND Highway 20

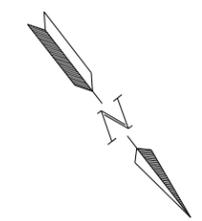
Estimate of Quantities



- ECB Type 1
- Fiber Rolls 12IN
- Temporary Cover Crop & Hydraulic Mulch

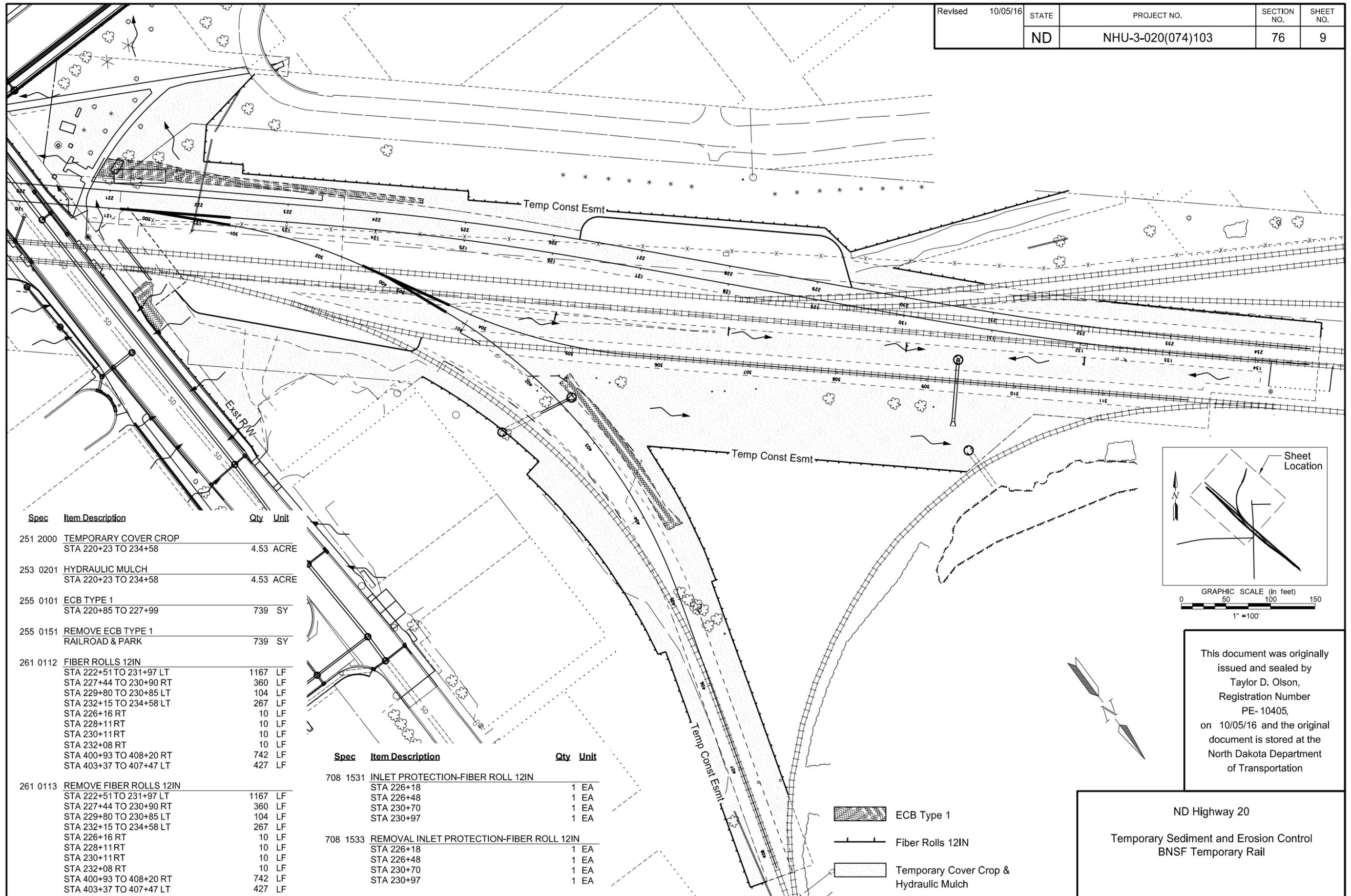
Spec	Item Description	Qty	Unit
251 2000	TEMPORARY COVER CROP STA 205+00 TO 219+51	2.42	ACRE
253 0201	HYDRAULIC MULCH STA 205+00 TO 219+51	2.42	ACRE
255 0101	ECB TYPE 1 STA 206+10 LT TO STA 219+10 LT	2875	SY
255 0151	REMOVE ECB TYPE 1 STA 206+10 LT TO STA 219+10 LT	2875	SY
261 0112	FIBER ROLLS 12IN STA 205+00 TO 206+10 RT STA 205+84 TO 208+44 LT STA 208+74 TO 218+05 LT STA 206+10 LT STA 208+10 LT STA 210+10 LT STA 212+10 LT STA 214+10 LT STA 216+10 LT	153 268 1083 10 10 10 10 10 10	LF LF LF LF LF LF LF LF LF

Spec	Item Description	Qty	Unit
261 0113	REMOVE FIBER ROLLS 12IN STA 205+00 TO 206+10 RT STA 205+84 TO 208+44 LT STA 208+74 TO 218+05 LT STA 206+10 LT STA 208+10 LT STA 210+10 LT STA 212+10 LT STA 214+10 LT STA 216+10 LT	153 268 1083 10 10 10 10 10 10	LF LF LF LF LF LF LF LF LF
708 1531	INLET PROTECTION-FIBER ROLL 12IN STA 216+40 LT	1	EA
708 1533	REMOVAL INLET PROTECTION-FIBER ROLL 12IN STA 216+40 LT	1	EA



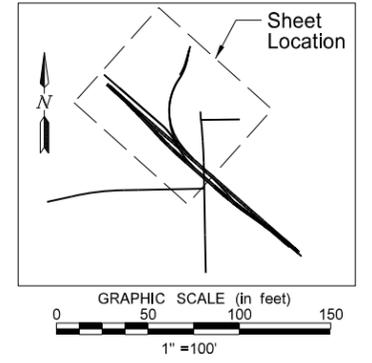
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ND Highway 20  
Temporary Sediment and Erosion Control  
BNSF Temporary Rail



Spec	Item Description	Qty	Unit
251 2000	TEMPORARY COVER CROP STA 220+23 TO 234+58	4.53	ACRE
253 0201	HYDRAULIC MULCH STA 220+23 TO 234+58	4.53	ACRE
255 0101	ECB TYPE 1 STA 220+85 TO 227+99	739	SY
255 0151	REMOVE ECB TYPE 1 RAILROAD & PARK	739	SY
261 0112	FIBER ROLLS 12IN STA 222+51 TO 231+97 LT STA 227+44 TO 230+90 RT STA 229+80 TO 230+85 LT STA 232+15 TO 234+58 LT STA 226+16 RT STA 228+11 RT STA 230+11 RT STA 232+08 RT STA 400+93 TO 408+20 RT STA 403+37 TO 407+47 LT	1167 360 104 267 10 10 10 10 742 427	LF LF LF LF LF LF LF LF LF LF
261 0113	REMOVE FIBER ROLLS 12IN STA 222+51 TO 231+97 LT STA 227+44 TO 230+90 RT STA 229+80 TO 230+85 LT STA 232+15 TO 234+58 LT STA 226+16 RT STA 228+11 RT STA 230+11 RT STA 232+08 RT STA 400+93 TO 408+20 RT STA 403+37 TO 407+47 LT	1167 360 104 267 10 10 10 10 742 427	LF LF LF LF LF LF LF LF LF LF

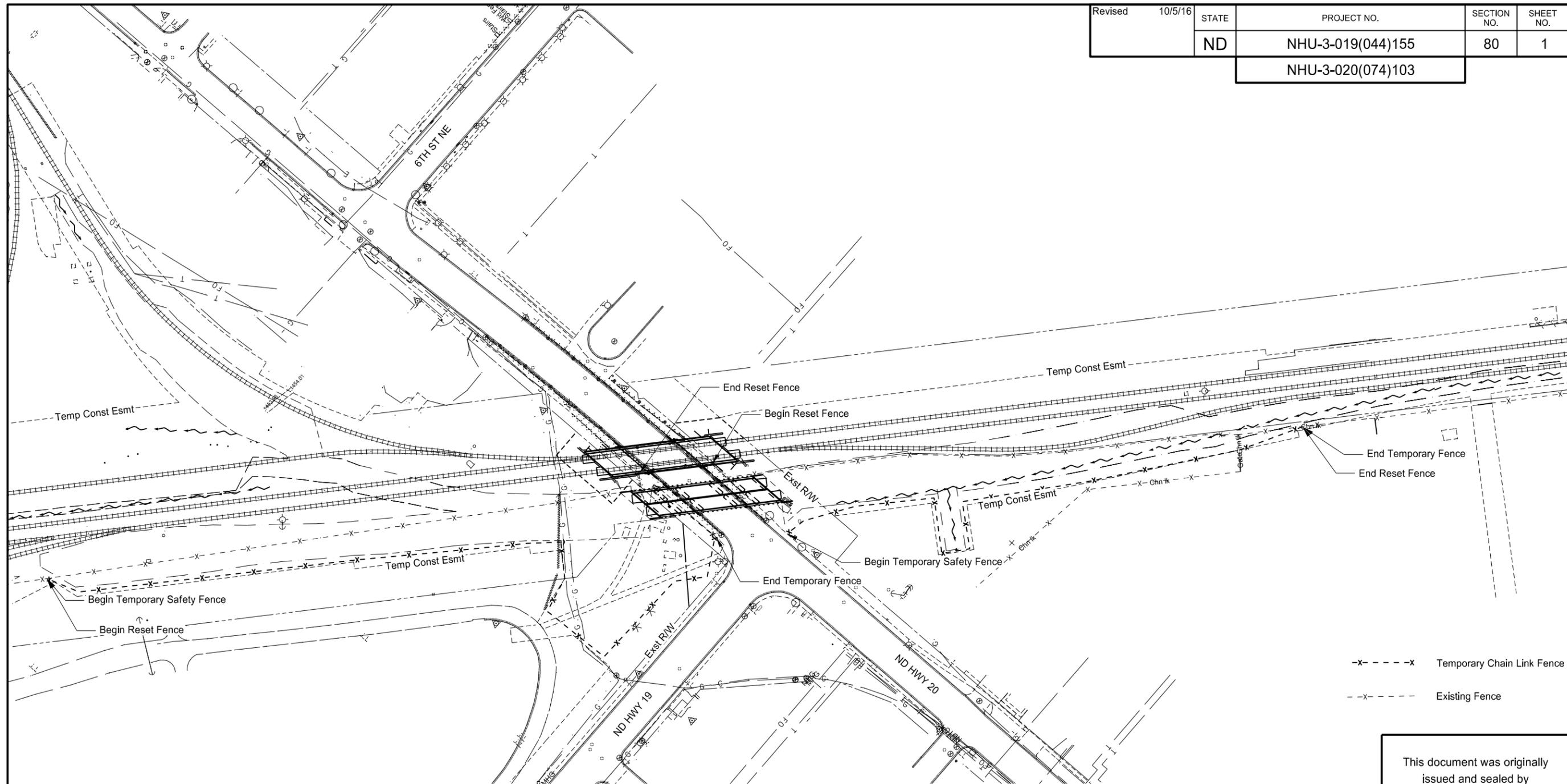
Spec	Item Description	Qty	Unit
708 1531	INLET PROTECTION-FIBER ROLL 12IN STA 226+18 STA 226+48 STA 230+70 STA 230+97	1 1 1 1	EA EA EA EA
708 1533	REMOVAL INLET PROTECTION-FIBER ROLL 12IN STA 226+18 STA 226+48 STA 230+70 STA 230+97	1 1 1 1	EA EA EA EA



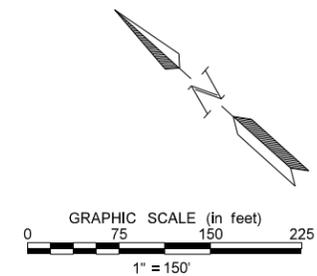
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ND Highway 20  
Temporary Sediment and Erosion Control  
BNSF Temporary Rail

Revised	10/5/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
		ND	NHU-3-019(044)155	80	1
			NHU-3-020(074)103		



Spec	Item Description	Qty	Unit
752 0600	FENCE CHAIN LINK SHOOFLY LIMITS	2180	LF
752 0922	FENCE REMOVE & RESET SHOOFLY LIMITS	1750	LF



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 of Transportation

ND Highway 19 &  
 ND Highway 20  
 Fence Layout

