

NORTH DAKOTA  
DEPARTMENT OF TRANSPORTATION  
**REQUEST FOR PROPOSAL**  
URBAN FEDERAL AID PROJECT NO. UGP-8-992(041) (PCN-22277)

0.460 Miles

GRADING, AGGREGATE BASE, PCC PAVEMENT, STORM SEWER, SIDEWALK, LANDSCAPING, SIGNING,  
PAVEMENT MARKINGS, STREET LIGHTING AND CITY UTILITIES  
SHEYENNE ST, WEST FARGO FROM 7TH AVE E N TO MAIN AVE (BUS 10)

CASS COUNTY

DBE Race Neutral Goal - 0%

**BID OPENING:** The bidder's proposal will be accepted via the Bid Express on-line bidding exchange at [www.bidx.com](http://www.bidx.com) until **09:30AM Central Time on November 13, 2020.**

Prior to submitting a Proposal, the Bidder shall complete all applicable sections and properly execute the Proposal Form in accordance with the specifications.

**Proposal Form of:**

\_\_\_\_\_  
(Firm Name)

\_\_\_\_\_  
(Address, City, State, Zipcode)

(For official use only)

PAGE INTENTIONALLY LEFT BLANK

**Project:** UGP-8-992(041) (PCN-22277)

---

The company, firm, corporation, or individual hereby acknowledges that it has designated a responsible person or persons as having the authority to obligate the company, firm, or individual, through electronic or paper submittal, to the terms and conditions described herein and in the contract documents. The designated responsible person submitting this proposal shall be hereafter known as the bidder. By submitting this proposal, the bidder fully accepts and agrees to all the provisions of the proposal. The bidder also certifies that the information given in this proposal is true and the certifications made in this proposal are correct.

The bidder acknowledges that they have thoroughly examined the plans, proposal form, specifications, supplemental specifications, special provisions and agrees that they constitute essential parts of this proposal.

The bidder acknowledges that all line items which contain a quantity shall have a unit price bid. Any line item which is bid lump sum shall contain a lump sum bid price.

The bidder acknowledges that they understand that the quantities of work required by the plans and specifications are approximate only and are subject to increases and decreases; the bidder understands that all quantities of work actually required must be performed and that payment therefore shall be at the prices stipulated herein; that the bidder proposes to timely furnish the specified materials in the quantities required and to furnish the machinery, equipment, labor and expertise necessary to competently complete the proposed work in the time specified.

#### **NON-COLLUSION AND DEBARMENT CERTIFICATION**

The bidder certifies that neither he/she, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this bid.

By submitting this proposal, the bidder certifies to the best of his/her knowledge and belief that he/she and his/her principles:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal Department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or perform a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property

**Project:** UGP-8-992(041) (PCN-22277)

- 
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph b. of the certification; and
  - d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or Local) terminated for cause or default

Where the prospective bidder is unable to certify to any of the statements in this certification, the bidder shall submit an explanation in the blanks provided herein. The explanation will not necessarily result in denial of participation in a contract:

Explanation: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If the prequalified bidder's status changes, he/she shall immediately submit a new fully executed non-collusion affidavit and debarment certification with an explanation of the change to the Contract Office prior to submitting the bid.

Failure to furnish a certification or an explanation will be grounds for rejection of a bid.

**BID LIMITATION (Optional)**

The bidder who desires to bid on more than one project on which bids are to be opened on the same date, and who also desires to avoid receiving an award of more projects than the bidder is equipped to handle, may bid on multiple projects and limit the total amount of work awarded to the bidder on selected projects by completing the "Bid Limitation".

The Bid Limitation must be filled in on each proposal form for which the Bidder desires protection. Each such proposal must be covered by a proposal guaranty.

The bid limitation can be made by declaring the total dollar value of work OR total number of projects a bidder is willing to perform.

The Bidder desires to disqualify all of his/her bids on this bid opening that exceed a total dollar value of \$ \_\_\_\_\_

OR

that exceed a total number of \_\_\_\_\_ projects.

The Bidder hereby authorizes the Department to determine which bids shall be disqualified.

**Project:** UGP-8-992(041) (PCN-22277)

---

**PERMISSIBLE DISCOUNT (optional)**

Only when invited to do so in the Request for Proposal by Special Provision, Bidders are permitted to offer a discount on a specific project (discount project) if they are awarded the contract on one or more additional projects bid at the same bid opening time and date. The bidder must present the proposal so that it can be considered with or without the discount. The bid or discount offered on the "discount project" will not affect the determination of the low bid of any other project.

When discounts are offered, they must be presented as a reduction in the unit price for one or more items of work in the specified proposal (discount project).

Space for Offering Discounts:

---

---

---

Item No: \_\_\_\_\_

Description: \_\_\_\_\_

Unit: \_\_\_\_\_

Proposal Quantity: \_\_\_\_\_ Unit Price Reduction: \$ \_\_\_\_\_ Discount: \$ \_\_\_\_\_

Item No: \_\_\_\_\_

Description: \_\_\_\_\_

Unit: \_\_\_\_\_

Proposal Quantity: \_\_\_\_\_ Unit Price Reduction: \$ \_\_\_\_\_ Discount: \$ \_\_\_\_\_

Item No: \_\_\_\_\_

Description: \_\_\_\_\_

Unit: \_\_\_\_\_

Proposal Quantity: \_\_\_\_\_ Unit Price Reduction: \$ \_\_\_\_\_ Discount: \$ \_\_\_\_\_

TOTAL DISCOUNT \_\_\_\_\_

It is understood that the discount will only apply if awarded under the conditions as listed above and signed by the bidder.

**Project:** UGP-8-992(041) (PCN-22277)

---

**RECEIPT OF ADDENDA ACKNOWLEDGEMENT**

We hereby acknowledge receipt of the following addenda:

Addendum # \_\_\_\_\_ Dated \_\_\_\_\_

Addendum # \_\_\_\_\_ Dated \_\_\_\_\_

Addendum # \_\_\_\_\_ Dated \_\_\_\_\_

Addendum # \_\_\_\_\_ Dated \_\_\_\_\_

Addendum # \_\_\_\_\_ Dated \_\_\_\_\_

Addendum # \_\_\_\_\_ Dated \_\_\_\_\_

**PROPOSAL GUARANTY**

A proposal guaranty is required. The proposal guaranty must comply with Section 102.09, "Proposal Guarantee" of the Standard Specifications.

TYPE OF PROPOSAL GUARANTY APPLIED TO THIS PROJECT (Check one):

\_\_\_\_\_ Annual Bid Bond\*

\_\_\_\_\_ Single Project Bid Bond

\_\_\_\_\_ Certified or Cashier's Check

\*Annual Bid Bond is required when submitting proposals electronically

**BID ITEMS**

**Project: UGP-8-992(041) (PCN-22277)**

**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
001	103	0100	CONTRACT BOND	L SUM	1.				
002	105	0200	POTHOLE UTILITY	EA	3.				
003	201	0330	CLEARING & GRUBBING	L SUM	1.				
004	201	0370	REMOVAL OF TREES 10IN	EA	12.				
005	201	0390	REMOVAL OF TREES 30IN	EA	1.				
006	202	0108	REMOVAL OF STRUCTURE-SITE 1	L SUM	1.				
007	202	0109	REMOVAL OF STRUCTURE-SITE 2	L SUM	1.				
008	202	0110	REMOVAL OF STRUCTURE-SITE 3	L SUM	1.				
009	202	0114	REMOVAL OF CONCRETE PAVEMENT	SY	16,413.				
010	202	0130	REMOVAL OF CURB & GUTTER	LF	5,562.				
011	202	0132	REMOVAL OF BITUMINOUS SURFACING	SY	4,846.				
012	202	0173	REMOVAL OF SEWER PIPE	LF	5,343.				
013	202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	1,107.				
014	202	0210	REMOVAL OF MANHOLES	EA	23.				
015	202	0230	REMOVAL OF INLETS	EA	29.				
016	202	0292	REMOVAL OF EXISTING RETAINING WALL	L SUM	1.				

**BID ITEMS**

<b>Project: UGP-8-992(041) (PCN-22277)</b>									
<b>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.</b>									
Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
017	202	0312	REMOVE EXISTING FENCE	LF	66.				
018	203	0101	COMMON EXCAVATION-TYPE A	CY	5,025.				
019	203	0109	TOPSOIL	CY	363.				
020	203	0138	COMMON EXCAVATION-SUBCUT	CY	500.				
021	210	0212	FLOWABLE FILL	CY	50.				
022	216	0100	WATER	M GAL	181.				
023	230	0300	SUBGRADE PREPARATION-TYPE A	STA	37.500				
024	251	0300	SEEDING CLASS III	ACRE	.450				
025	253	0201	HYDRAULIC MULCH	ACRE	.890				
026	302	0050	TRAFFIC SERVICE AGGREGATE	TON	100.				
027	302	0120	AGGREGATE BASE COURSE CL 5	TON	5,960.				
028	302	9970	TYPE II PIPE BEDDING	CY	961.				
029	430	0500	COMMERCIAL GRADE HOT MIX ASPHALT	TON	943.				
030	550	0106	7IN REINF CONCRETE PAVEMENT CL AE	SY	1,001.				
031	550	0117	9IN NON-REINF CONCRETE PAVEMENT CL AE	SY	9,338.				
032	702	0100	MOBILIZATION	L SUM	1.				



**BID ITEMS**

**Project: UGP-8-992(041) (PCN-22277)**

**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	704	0100	FLAGGING	MHR	300.				
034	704	1000	TRAFFIC CONTROL SIGNS	UNIT	2,406.				
035	704	1052	TYPE III BARRICADE	EA	30.				
036	704	1054	SIDEWALK BARRICADE	EA	24.				
037	704	1056	PEDESTRIAN CHANNELIZATION	LF	500.				
038	704	1060	DELINEATOR DRUMS	EA	107.				
039	704	4011	PORTABLE CHANGEABLE MESSAGE SIGN	EA	2.				
040	708	1540	INLET PROTECTION-SPECIAL	EA	104.				
041	708	1541	REMOVE INLET PROTECTION-SPECIAL	EA	104.				
042	709	0151	GEOSYNTHETIC MATERIAL TYPE R1	SY	15,244.				
043	714	0115	PIPE CONC REINF 12IN CL III-STORM DRAIN	LF	69.				
044	714	0210	PIPE CONC REINF 15IN CL III-STORM DRAIN	LF	1,146.				
045	714	0315	PIPE CONC REINF 18IN CL III-STORM DRAIN	LF	330.				
046	714	0620	PIPE CONC REINF 24IN CL III-STORM DRAIN	LF	320.				
047	714	0870	PIPE CONC REINF 33IN CL III-STORM DRAIN	LF	11.				
048	714	0910	PIPE CONC REINF 36IN CL III-STORM DRAIN	LF	557.				

**BID ITEMS**

**Project: UGP-8-992(041) (PCN-22277)**

**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
049	714	1110	PIPE CONC REINF 48IN CL III-STORM DRAIN	LF	174.				
050	714	1212	PIPE CONC REINF 54IN CL III-STORM DRAIN	LF	997.				
051	714	6580	PIPE POLYETHYLENE CORR PERF 4IN DRAIN	LF	2,044.				
052	714	7033	PIPE PVC 15IN	LF	36.				
053	714	8498	CASING PIPE 18IN	LF	20.				
054	714	9696	EDGEDRAIN NON PERMEABLE BASE	LF	5,778.				
055	714	9910	FLAP GATE 18IN	EA	1.				
056	722	0100	MANHOLE 48IN	EA	9.				
057	722	0110	MANHOLE 60IN	EA	15.				
058	722	0120	MANHOLE 72IN	EA	2.				
059	722	0130	MANHOLE 84IN	EA	4.				
060	722	0140	MANHOLE 96IN	EA	9.				
061	722	0300	MANHOLE SANITARY	EA	6.				
062	722	0315	MANHOLE CASTING	EA	2.				
063	722	1100	MANHOLE RISER 48IN	LF	39.				
064	722	1110	MANHOLE RISER 60IN	LF	78.				

**BID ITEMS**

<b>Project: UGP-8-992(041) (PCN-22277)</b>									
<b>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.</b>									
Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
065	722	1120	MANHOLE RISER 72IN	LF	8.				
066	722	1130	MANHOLE RISER 84IN	LF	20.600				
067	722	1140	MANHOLE RISER 96IN	LF	73.				
068	722	3297	ABANDON STORM SEWER	LF	385.				
069	722	3510	INLET-TYPE 2	EA	46.				
070	722	3520	INLET-TYPE 2 DOUBLE	EA	3.				
071	722	3701	INLET SPECIAL-TYPE 2 48IN	EA	3.				
072	722	3761	INLET SPECIAL-TYPE 2 60IN	EA	1.				
073	722	3900	INLET SLOTTED DRAIN 12IN	LF	20.				
074	722	6160	ADJUST INLET	EA	1.				
075	722	6201	ADJUST MANHOLE SPECIAL	EA	1.				
076	724	0210	FITTINGS-DUCTILE IRON	LBS	3,580.				
077	724	0270	REMOVE GATE VALVE & BOX	EA	12.				
078	724	0290	GATE VALVE & BOX 4IN	EA	1.				
079	724	0300	GATE VALVE & BOX 6IN	EA	14.				
080	724	0310	GATE VALVE & BOX 8IN	EA	10.				

**BID ITEMS**

<b>Project: UGP-8-992(041) (PCN-22277)</b>									
<b>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.</b>									
Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
081	724	0411	6IN HYDRANT	EA	3.				
082	724	0430	REMOVE HYDRANT	EA	3.				
083	724	0611	WATER SERVICE LINE 1IN	LF	314.				
084	724	0621	WATER SERVICE LINE 2IN	LF	111.				
085	724	0636	WATER SERVICE LINE 6IN	LF	147.				
086	724	0670	TEMPORARY WATER SERVICE	L SUM	1.				
087	724	0790	WATERMAIN 4IN PVC	LF	81.				
088	724	0810	WATERMAIN 6IN PVC	LF	80.				
089	724	0830	WATERMAIN 8IN PVC	LF	3,499.				
090	724	0852	WATERMAIN 16IN PVC	LF	5.				
091	724	0955	WATER SERVICE CONNECTION 1IN	EA	12.				
092	724	0960	WATER SERVICE CONNECTION 2IN	EA	3.				
093	724	0970	WATER LINE CONNECTION 4IN	EA	2.				
094	724	0975	WATER LINE CONNECTION 6IN	EA	3.				
095	724	0980	WATER LINE CONNECTION 8IN	EA	2.				
096	724	1035	SPRINKLER RELOCATION	L SUM	1.				

**BID ITEMS**

**Project: UGP-8-992(041) (PCN-22277)**

**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	1110	8IN SANITARY SEWER PIPE	LF	763.				
098	724	6013	ABANDON VALVE BOX	EA	6.				
099	724	6031	ABANDON WATER MAIN/SERVICE LINE	LF	2,372.				
100	744	0100	POLYSTYRENE INSULATION BOARD	BD FT	1,664.				
101	748	0140	CURB & GUTTER-TYPE I	LF	490.				
102	748	0141	CURB & GUTTER-TYPE 1 SPECIAL	LF	1,061.				
103	748	0190	CURB & GUTTER-TYPE I 30IN	LF	5,548.				
104	748	0500	CURB HEADER-TYPE I	LF	540.				
105	748	0520	CURB-TYPE I	LF	167.				
106	748	1080	VALLEY GUTTER-TYPE I 48IN	SY	420.				
107	750	0030	PIGMENTED IMPRINTED CONCRETE	SY	1,665.				
108	750	0115	SIDEWALK CONCRETE 4IN	SY	478.				
109	750	0120	SIDEWALK CONCRETE 5IN REINF	SY	4,640.				
110	750	1000	DRIVEWAY CONCRETE	SY	820.				
111	750	1016	DRIVEWAY CONCRETE 6IN REINFORCED	SY	187.				
112	750	2115	DETECTABLE WARNING PANELS	SF	676.600				

**BID ITEMS**

**Project: UGP-8-992(041) (PCN-22277)**

**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	752	0911	TEMPORARY SAFETY FENCE	LF	1,000.				
114	754	0110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	210.600				
115	754	0112	FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	SF	67.500				
116	754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	206.				
117	754	0592	RESET SIGN PANEL	EA	1.				
118	754	1104	REMOVE SIGN FOUNDATION	EA	1.				
119	762	0112	EPOXY PVMT MK MESSAGE	SF	64.				
120	762	0113	EPOXY PVMT MK 4IN LINE	LF	1,114.				
121	762	0115	EPOXY PVMT MK 8IN LINE	LF	212.				
122	762	0117	EPOXY PVMT MK 24IN LINE	LF	34.				
123	762	0122	PREFORMED PATTERNED PVMT MK-MESSAGE(GROOVED)	SF	64.				
124	762	1250	PREFORMED THERMO PLASTIC PVMT MK 4IN LINE	LF	243.				
125	762	1280	PREFORMED THERMO PLASTIC PVMT MK MESSAGE	SF	48.				
126	762	1305	PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED	LF	5,241.				
127	762	1309	PREFORMED PATTERNED PVMT MK 8IN LINE-GROOVED	LF	201.				
128	762	1325	PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED	LF	1,541.				

**BID ITEMS**

**Project: UGP-8-992(041) (PCN-22277)**

**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	770	0003	LIGHTING SYSTEM A	EA	1.				
130	770	9271	CUSTOM ELECTRICAL PANEL	EA	1.				
131	770	9273	SERVICE OUTLET	EA	1.				
132	770	9404	LIGHTING SYSTEM (LANDSCAPE)	L SUM	1.				
133	772	9200	IT SYSTEM	EA	1.				
134	930	9543	RETAINING WALL	SF	1,273.				
135	970	0004	LANDSCAPE INTERLOCKING BLOCK	SF	858.				
136	970	0007	LANDSCAPE PREPARATION	EA	1.				
137	970	0050	STRUCTURAL SOIL	CY	161.				
138	970	0060	PLANTING SOIL	CY	353.				
139	970	0074	WOOD MULCH	CY	43.				
140	970	0095	HERBICIDE WEED CONTROL	ACRE	.900				
141	970	0300	BENCH	EA	14.				
142	970	0320	TRASH RECEPTACLE	EA	8.				
143	970	0450	BIKE RACKS	EA	8.				
144	970	0600	CAST IRON TREE GRATES	EA	7.				

**BID ITEMS**

**Project: UGP-8-992(041) (PCN-22277)**

**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	970	1000	TREES	EA	20.				
146	970	1012	SHRUBS GROUP A	EA	27.				
147	970	1025	REPLANT TREES	EA	1.				
148	970	1030	PERENNIALS GROUP A	EA	1,033.				
149	990	0221	GUARD POST-REMOVABLE	EA	6.				
			<b>TOTAL SUM BID</b>						



**Project:** UGP-8-992(041) (PCN-22277)

**Type of Work:** GRADING, AGGREGATE BASE, PCC PAVEMENT, STORM SEWER, SIDEWALK, LANDSCAPING, SIGNING, PAVEMENT MARKINGS, STREET LIGHTING AND CITY UTILITIES

**County:** CASS

**Length:** 0.4600 Miles

---

**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 06/15/2022 \*. 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 NOTE 100-P01 COMPLETION DATES FOR INTERIM COMPLETION DATES AND LIQUIDATED DAMAGE INFORMATION.**

**PROPOSAL FORM**

North Dakota Department of Transportation

**BID OPENING: November 13, 2020****Job 002**

Page 16 of 16

**Project:** UGP-8-992(041) (PCN-22277)**Type of Work:** GRADING, AGGREGATE BASE, PCC PAVEMENT, STORM SEWER, SIDEWALK, LANDSCAPING, SIGNING, PAVEMENT MARKINGS, STREET LIGHTING AND CITY UTILITIES**County:** CASS**Length:** 0.4600 Miles**CONTRACT EXECUTION:**

The undersigned Bidder agrees, if awarded the contract, to execute the contract form and furnish a contract bond within fifteen calendar days, as determined by NDCC Section 1-02-15, after date of notice of award, in accordance with the provisions of Sections 103.05 and 103.06 of the Standard Specifications.

**AFFIDAVIT:**

**STATE OF** \_\_\_\_\_ )  
 ) **ss.**  
**COUNTY OF** \_\_\_\_\_ )

The undersigned bidder, being duly sworn, does depose and say that they are an authorized representative of \_\_\_\_\_

CONTRACTOR NAME

of \_\_\_\_\_, a

MAILING ADDRESS

☐ Individual☐ Partnership☐ Joint Venture☐ Corporation

and that they have read, understand, acknowledge, and accept the entire proposal form; and that all statements made by said bidder are true and correct.

\_\_\_\_\_  
BIDDER MUST SIGN ON THIS LINE

\_\_\_\_\_, TITLE \_\_\_\_\_

\_\_\_\_\_  
TYPE OR PRINT SIGNATURE ON THIS LINE

Subscribed and sworn to before me this day.

\_\_\_\_\_  
COUNTY

(Seal)

\_\_\_\_\_  
STATE\_\_\_\_\_  
DATE\_\_\_\_\_  
NOTARY PUBLIC

My commission expires \_\_\_\_\_

# **NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**

Job # 02, UGP-8-992(041)

Grading, Aggregate Base, PCC Concrete Pavement, Storm Sewer, Sidewalk  
Landscaping, Signing, Pavement Markings, Street Lighting  
City Utilities

## **INDEX OF PROVISIONS**

Road Restriction Permits

Hot Line Notice

Price Schedule for Miscellaneous Items dated October 1, 2014 (PS-1)

SP DBE Program - Race Neutral dated February 1, 2018

E.E.O. Affirmative Action Requirements dated March 15, 2014

Appendix A of the Title VI Assurances dated September 8, 2020

Appendix E of the Title VI Assurances dated September 8, 2020

SP Cargo Preference Act

Required Contract Provisions Federal Aid Construction Contracts  
(Form FHWA 1273 Rev. May 1, 2012)

SP Certified Payrolls, dated 9-6-17

SP DBE Project Payment Reporting, dated 10-3-17

NOTICE - Electrician

Labor Rates from U.S. Department of Labor dated August 28, 2020 (Mod. No. 5)

On-The-Job Training Program dated October 1, 2016

SSP 1 Temporary Erosion & Sediment Best Management Practices

SSP 3 Local Agency Contracts

SSP 5 Limitations of Operations

## **INDEX OF PROVISIONS**

Page 2 of 2

SSP 7 Bitumen Testing Price Adjustments

SSP 9 HMA Acceptance

SSP 8 Federal Prohibition on Certain Technological Hardware

SP 99(20) City of West Fargo Supplemental Specifications

SP 100(20) Commercial Grade Hot Mix Asphalt

SP 101(20) Utility Coordination

SP Fuel Cost Adjustment Clause dated September 8, 2006

Contract

Payment Bond

Performance Bond

# NOTICE

**TO: All prospective bidders on all North Dakota Department of Transportation Highway Construction Projects.**

Contractors moving construction equipment to NDDOT highway construction projects are subject to the Road Restriction Policy with the following modifications:

- A. The contractor may purchase up to 10 single trip permits for each NDDOT highway construction project at a cost ranging from \$20 to \$70 each. These permits must be purchased from the Motor Carrier Division of the Highway Patrol at the central office of the NDDOT in Bismarck, North Dakota.
- B. The \$1 per mile fee will not be charged for Gross Vehicle Weights (GVW) exceeding 105,500 pounds, 105,500 pounds, and 105,000 pounds for highways Restricted by Legal Weights, 8 Ton, and 7 Ton highways respectively.
- C. The \$5 per ton per mile fee will be charged only for loads exceeding a GVW of 130,000 pounds, 120,000 pounds, 110,000 pounds and 80,000 pounds for highways Restricted by Legal Weights, 8 Ton, 7 Ton, and 6 Ton highways respectively.
- D. The maximum weights per axle for each of the class restrictions still apply. If it is shown that more axles cannot be added, movement may be authorized; however, a \$1 per ton per mile fee will be charged for all weight in excess of the restricted axle limits.
- E. These construction equipment single trip permits apply to State and US Highways only.
- F. The District Engineers and Highway Patrol will select the route of travel.
- G. Contractors moving equipment to other than NDDOT highway construction projects are subject to all fees as shown in the Road Restriction Permit Policy.
- H. Contractors must call the Highway Patrol prior to movement of all overweight loads on all State and US Highways.

# NDDOT ROAD AND VEHICLE RESTRICTIONS

Date Revised 05-22-10

## ROAD RESTRICTION PERMITS

Permits shall be issued for the movement of non-divisible vehicles and loads on state highways which exceed the weight limits during spring road restrictions. The issuance of permits may be stopped or posted weights changed at any time based on the varying conditions of the roadways. Permits can be obtained from the Highway Patrol.

RESTRUCTION CLASSIFICATIONS WITH ALLOWABLE AXLE WEIGHTS AND GROSS VEHICLE WEIGHTS	PERMIT AND TON/MILE FEES
<p>Highways Restricted by Legal Weight</p> <p>Single Axle -- 20,000 lbs. Tandem Axle -- 34,000 lbs. Triple Axle -- 48,000 lbs. 4 Axles or more -- 15,000 lbs. per axle</p> <p>Gross Vehicle Weight -- 105,500 lbs.</p> <p>Note: The above weights apply to state highways restricted by legal weights, other than interstate highways, in areas where road restrictions are in force. When the gross weight of an axle grouping exceeds 48,000 pounds, the \$1 per ton per mile shall apply to all weight in excess of 15,000 pounds per axle.</p>	<p>Permit Fee: \$20-\$70 per trip</p> <p>Ton Mile Fee:</p> <p>105,501 lbs. to 130,000 lbs. GVW -- \$1 per mile</p> <p>Over 130,000 lbs. GVW -- \$1 per mile <b>plus</b> \$5 per ton per mile for that weight exceeding 130,000 lbs. GVW</p> <p>Exceeding axle limits -- \$1 per ton per mile</p>
<p>8-Ton:</p> <p>Single Axle -- 16,000 lbs. Tandem Axle -- 32,000 lbs. 3 Axles or more -- 14,000 lbs. per axle</p> <p>Gross Vehicle Weight -- 105,500 lbs.</p>	<p>Permit Fee: \$20-\$70 per trip</p> <p>Ton Mile Fee:</p> <p>105,501 lbs. to 120,000 lbs. GVW -- \$1 per mile</p> <p>Over 120,000 lbs. GVW -- \$1 per mile <b>plus</b> \$5 per ton per mile for that weight exceeding 120,000 lbs. GVW</p> <p>Exceeding restricted axle limits -- \$1 per ton per mile</p>
<p>7-Ton:</p> <p>Single Axle -- 14,000 lbs. Tandem Axle -- 28,000 lbs. 3 Axles or more -- 12,000 lbs. per axle</p> <p>Gross Vehicle Weight -- 105,500 lbs.</p>	<p>Permit Fee: \$20-\$70 per trip</p> <p>Ton Mile Fee:</p> <p>105,500 lbs. to 110,000 lbs. GVW -- \$1 per mile</p> <p>Over 110,000 lbs. GVW -- \$1 per mile <b>plus</b> \$5 per ton per mile for that weight exceeding 110,000 lbs. GVW</p> <p>Exceeding restricted axle limits -- \$1 per ton per mile</p>
<p>6-Ton:</p> <p>Single Axle -- 12,000 lbs. Tandem Axle -- 24,000 lbs. 3 Axles or more -- 10,000 lbs. per axle</p> <p>Gross Vehicle Weight -- 80,000 lbs.</p>	<p>Permit Fee: \$20-\$70 per trip</p> <p>Ton Mile Fee:</p> <p>\$5 per ton per mile for all weight exceeding 80,000 lbs. GVW</p> <p>Exceeding restricted axle limits -- \$1 per ton per mile</p>
<p>5-Ton:</p> <p>Single Axle -- 10,000 lbs. Tandem Axle -- 20,000 lbs. 3 Axles or more -- 10,000 lbs. per axle</p> <p>Gross Vehicle Weight -- 80,000 lbs.</p>	<p>No overweight movement allowed</p>

## **SINGLE UNIT FIXED LOAD VEHICLES SUCH AS TRUCK CRANES AND WORKOVER RIGS**

### **A. Permit Fee and Ton Mile Fee for Self-Propelled Fixed Load Vehicles .**

1. Permit Fee: \$25 per trip
2. \$1 per ton per mile for all weight in excess of restricted axle limits or in excess of legal limits on state highways in areas where road restrictions are in force. When the gross weight of an axle grouping exceeds 48,000 pounds, the \$1 per ton per mile shall apply to all weight in excess of 15,000 pounds per axle (see weight classification chart in section C.)
3. **\$5 per ton per mile** for all movements exceeding the following gross vehicle weight limits:
  - a. 105,500 lbs. GVW on unrestricted state highways, other than interstate highways, in areas where road restrictions are in force.
  - b. 105,500 lbs. GVW on 8-ton highways.
  - c. 105,500 lbs. GVW on 7-ton highways.
  - d. 80,000 lbs. GVW on 6-ton highways.
  - e. No overweight movement allowed on 5-ton highways

### **B. Permit Fees for Work-Over Rigs and Special Mobile Equipment Exceeding 650 but not 670 Pounds Per Inch Width of Tire.**

1. Permit Fee:
  - a. \$50 per trip on work-over rigs up to 650 pounds per inch width.
  - b. \$75 per trip on work -over rigs that exceed 650 but not 670 pounds per inch width of tire.
2. The work-over rig shall be stripped to the most minimum weights.
3. A minimal number of state highway miles shall be used.
4. District engineer approval shall be obtained prior to movement when vehicle exceeds restricted axle weights by more than 5,000 pounds.
5. A validation number ending in TM must be obtained from the Highway Patrol prior to using a self-issue single trip movement approval form.
6. The ton mile shall be waived .

# NOTICE

## U.S. DEPARTMENT OF TRANSPORTATION

### "HOT LINE"

As part of its continuing investigation into Highway Construction Contract Bid Rigging and abuses in the Disadvantaged Business Enterprise Program, the Inspector General for the Department of Transportation (DOT) has established a "HOT LINE" to receive information from contractors, suppliers, or anyone with knowledge of such activities.

The toll-free "HOT LINE" telephone number is 1-800-424-9071 and will be manned during normal working hours (8 a.m. to 5 p.m. EST). This operation is under the direction of DOT's Inspector General. All information will be treated confidentially and anonymity will be respected.

#### **CALL**

**Inspector General's 'HOT LINE'**  
**Toll Free 1-800-424-9071**  
**Washington, DC Area:**  
**202-366-1461**  
**Fax: 202-366-7749**

#### **WRITE**

**Inspector General**  
**Post Office Box 23178**  
**Washington, DC 20026-0178**  
  
**Email: [hotline@oig.dot.gov](mailto:hotline@oig.dot.gov)**

**The field office address and telephone number for NORTH DAKOTA is:**

#### **CHICAGO REGIONAL OFFICE**

**Special Agent-in-Charge**  
**Commercial: 312-353-0106**  
**111 N. Canal St., Suite 677**  
**Chicago, Illinois 60606**



10/1/2014

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION  
PRICE SCHEDULE FOR MISCELLANEOUS ITEMS (PS-1)**

The Contractor agrees to accept the following unit prices for each listed item of work and or material when no project contract unit price exists for that item. Each price listed will be full compensation for the cost of labor, material and equipment necessary to provide the item of work and/or material, complete in place, including (but not limited to) royalty, disposal of unsuitable material, equipment rental, sales tax, use tax, overhead, profit, and incidentals.

Each listed item is referenced to the Standard Specifications by Section number and Section name.

SECTION NO.	SECTION NAME	ITEM NAME	PRICE PER ITEM
107.08	Haul Roads	Water	\$27 per M Gal
107.08	Haul Roads	Bitumen for Mix	Invoice Price <sup>1</sup> + 10%
107.08	Haul Roads	Bituminous Mix	\$42 per Ton <sup>2</sup>
107.08	Haul Roads	Aggregate Base	\$17 per Ton <sup>2</sup>
203.01 B	Rock Excavation	Rock Excavation	\$11 per CY
203.01 C	Shale Excavation	Shale Excavation	Common Excavation Price + \$1.00 per CY
203.01 D	Muck Excavation	Muck Excavation	\$9 per CY
203.05 H.3	Embankment	Overhaul	\$1.40 per CY - Mile
260	Silt Fence	Mucking Silt Fence	\$3.90 per LF
260	Silt Fence	Removal of Silt Fence <sup>3</sup>	\$4.25 per LF
261	Fiber Rolls	Mucking of Fiber Rolls	\$3.90 per LF
261	Fiber Rolls	Removal of Fiber Rolls <sup>3</sup>	\$4.25 per LF
420.04 E	Bituminous Seal Coat	Blotter Sand	\$27 per Ton <sup>2</sup>
430.04 G	Hot Mix Asphalt (Exc. Material Hauled to Disposal Area)	Bituminous Mixture	Machine Placed: Bid or Invoice Price + \$31 per ton Hand Placed: Bid or Invoice Price + \$48 per Ton
704	Temporary Traffic Control	Flagging	\$32 per MHR

<sup>1</sup>Price paid for bituminous material will be invoice price plus freight costs.

<sup>2</sup>Price Includes haul up to 10 miles. Payment for haul exceeding 10 miles will be according to Section 109.03 E, "Force Account." The haul distance for aggregate base and bituminous mix will be based on the average haul. The haul distance for blotter sand will be from the point where the haul begins to the point where it enters the project.

<sup>3</sup>This is only for pre-existing items that were not installed under the Contract.

## NORTH DAKOTA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION: DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM

PROJECT UGP-8-992(041) (PCN-22277)

RACE/GENDER NEUTRAL GOAL: 0%

NDDOT Contact Information	
Contractor Sign In & Submit Advertisements <a href="https://apps.nd.gov/dot/cr/csi/login.htm">https://apps.nd.gov/dot/cr/csi/login.htm</a>	Amy Conklin, DBE Program Administrator 701-328-3116 - or - <a href="mailto:aconklin@nd.gov">aconklin@nd.gov</a>
Submit quotes and post-bid documentation to: <a href="mailto:subquotes@nd.gov">subquotes@nd.gov</a> or Fax: 701-328-0343	Ramona Bernard, Civil Rights Division Director 701-328-2576 - or - <a href="mailto:rbernard@nd.gov">rbernard@nd.gov</a>
DBE Directory <a href="https://dotnd.diversitycompliance.com/">https://dotnd.diversitycompliance.com/</a>	All times are stated in Central Time. <b>The day of the bid opening is not counted as one of the business days.</b>

### PURPOSE

These provisions:

1. Provide an explanation of the federal law and outline the obligations to comply with the Federal DBE requirements applicable to this contract,
2. Explain the process NDDOT will follow to evaluate bidders' efforts to obtain DBE participation
3. Provide the standards NDDOT will use to measure compliance with the requirements
4. Identify sanctions for failing to comply with DBE program requirements.

### QUOTES:

All bidders and all subcontractors over \$500,000 (regardless of whether they are apparent low bidder or their quote was used on a project in this bid opening) should submit a completed [SFN 52013-List of Businesses Submitting Quotes](#) by 4:00 pm CST, within 5 business days after the bid opening. **(Copies of quotes are no longer accepted).** This process is necessary in identifying "ready, willing, and able" contractors upon which to base the NDDOT Triennial DBE Goal. The number of contractors and the types of work they have bid/quoted will be used in the calculation of the DBE goal for each goal setting period.

**All subcontractors, suppliers, manufacturers, regular dealers, vendors, and brokers should fax or email quotes to the Department no later than 9 PM the day before each bid opening.**

**All DBEs quoting on this project should submit all quotes and a list of contractors they quoted to NDDOT no later than 9 PM the day before each bid opening.**

Prime contractors preparing to bid on NDDOT highway projects have requested that quotes be sent to them the day before the bid opening by:

- 2 PM Central - Suppliers (brokers/regular dealers), vendors, & manufacturers
- 5 PM Central - Subcontractors under \$500,000
- 8 PM Central - Subcontractors over \$500,000

## REQUIREMENTS FOR ALL BIDDERS:

- ALL BIDDERS are strongly encouraged to submit all documentation at the time of bid opening.
- Must submit Form A with bid package at the time of bid opening.
- Must submit [Form C \(Notification of Intent to use\)](#) for DBE (if used) by 4:00 pm CST, within 2 business days after the bid opening. If no DBE's are used, Form C is not required.
- Completed [Form B](#), or a spreadsheet containing all the information on Form B, should be submitted by 4:00 pm, CST within 5 business days after the bid opening.
- Prime contractors are strongly encouraged to submit their bid documentation in one electronic file. Forms incorrectly submitted could result in a technicality, forcing the Department to award to the next responsive bidder.

To maximize subcontracting opportunities the following actions are encouraged.

## ADVERTISE

All DBE and Non-DBE prime contractors and all subcontractors (over/under \$500,000), vendors, regular dealers/suppliers, and manufacturers, are encouraged to advertise using one of the two options:

**OPTION 1:** Place an advertisement soliciting DBE participation using the electronic [DBE Advertisement System](#).

- Submit the required information online at <https://apps.nd.gov/dot/cr/csi/login.htm> no later than noon, 15 calendar days before the bid opening.

**OPTION 2:** Directly contact by email or fax, all DBEs certified in the specific work type (NAICS) required for the job.

- Make contact with DBEs no later than 5 PM 7 calendar days before the bid opening.
- Use the DBE Directory to determine the DBE firms certified in the work to be subcontracted.

Either method of advertisement should:

- Provide the name, email address, telephone, and fax number of the company contact who will be available to discuss and/or receive quotes.
- Offer assistance to DBEs in interpreting plans; quantities; expected overtime; project scheduling; pit and batch plan locations, length of haul, type of road; method of measurement (seeding by the mile or acre, hauling by hour or by ton-mile) or other issues that may affect a price quote.

**Indicate your intention to bid** and/or receive quotes on specific jobs by using the Department's Bid Opening Sign in System

- The **[Bid Opening Sign-In](#)** web application located at <https://apps.nd.gov/dot/cr/csi/login.htm>. Sign-In opens at 8 AM 7 calendar days prior to the bid opening and closes at 11 AM the day before the bid opening.
- Fill in the online form fields as required.
- Log in to download the "Bid Opening Contact Report" at <https://apps.nd.gov/dot/cr/csi/public/listBidOpenings.htm>

## RECEIVE & EVALUATE ALL QUOTES GIVEN

All prime contractors and all subcontractors over \$500,000 should receive and evaluate all quotes offered.

All quotes given for each job should be faxed or emailed to prime contractors or subcontractors no later than the day before the bid opening. Subcontractors interested in work on the advertised jobs are encouraged to quote all contractors on the Sign-In report.

## **POST-AWARD REQUIREMENTS**

### **FEDERAL AUTHORITY**

The following paragraph must be included in all subcontracts of all tiers in accordance with 49 CFR § 26.13(b):

The contractor or all tiers of subcontractors shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR § 26.13 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as NDDOT deems appropriate which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible

It is the prime contractors' responsibility to ensure all tiers of subcontractors, brokers, manufacturers, suppliers, vendors, and regular dealers comply with the requirements of this special provision. In addition, the prime contractor has the responsibility to monitor DBE performance on the project, and to ensure that the DBE performs a commercially useful function (CUF).

### **PRIME CONTRACTOR'S MONITORING, RESPONSIBILITIES, REPORTING**

For the life of the project, the prime contractor is responsible for the DBEs listed on Form C and for the specific spec/code items or products that the prime committed to during the award process.

The prime contractor is responsible to:

- Report payments to DBEs used to meet the project goal. **Payments on the contract must be entered and stored in the CCS. Use of CCS on the project eliminates the requirement to submit SFN 60638 and SFN 14268.**
- Invite and encourage all subcontractors and all DBEs listed on [Form C](#) to the pre-construction conference.
- Provide minutes to any DBE not in attendance at the pre-construction conference.
- Ensure their firm as well as any subcontractors, manufacturers, and regular dealers/suppliers comply with the requirements of this special provision.
- Provide all subcontractors with Proposed Project Schedules and any necessary updates.
- Monitor DBE performance on the project.
  - Submit [SFN 60597, DBE Performance – Commercially Useful Function \(CUF\)](#) Certification to the project engineer with [SFN 5682, Prime Contractor's Request to Sublet](#). Project engineers will not approve Requests to Sublet without the CUF Certification.
- Maintain project records and documentation of payments to DBEs for three years following acceptance of the final payment from NDDOT (per FHWA-1273, Section II Nondiscrimination #11).
  - This reporting requirement also applies to any certified DBE.
  - NDDOT may perform interim audits of contract payments to DBEs to ensure that the actual amount paid to DBEs equals or exceeds the dollar amount stated on Form C.
  - Make these records available for inspection, upon request, by an authorized representative of the NDDOT or USDOT.

**If SFN 60597, and reports of payment are not received in a timely manner, progress payments will be withheld from the prime until submitted.**

## **NDDOT MONITORING AND ENFORCEMENT MECHANISMS**

The Department will bring any false, fraudulent, or dishonest conduct in connection with the DBE program to the attention of USDOT. USDOT may pursue action as provided in 49 CFR § 26.107. Actions include referral to the Department of Justice for criminal prosecution or referral to the USDOT Inspector General for action under suspension and debarment, or Program Fraud and Civil Remedies rules. The Department will also consider similar action under its own legal authority, including responsibility determination in future contracts.

## **COMMERCIALLY USEFUL FUNCTION**

DBEs are required to perform a commercially useful function (CUF). CUF refers to those services the DBE is certified to perform. Certified services for each DBE are listed in the online DBE Directory. It is a DBE's responsibility to immediately notify the prime contractor in writing if the DBE is unable to perform a CUF or the services indicated on [Form C](#).

The contractor must certify that DBEs working on the prime's contract are performing a commercially useful function. Submit [SFN 60597, DBE Performance – Commercially Useful Function Certification](#) to the project engineer with [SFN 5682 -Contractor's Request to Sublet](#). Project engineers will not approve the Requests to Sublet without the CUF Certification. A review of the certification must be performed by the project engineer to determine whether the contract dollar value of the DBE's work may be counted toward the project goal.

The Department counts participation to a DBE contractor toward DBE goals only if the DBE is performing a CUF on that contract.

- A. A DBE performs a CUF when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a CUF, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, installation and paying for the material itself. 49 CFR § 26.55(c)(1)
- B. A DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. 49 CFR § 26.55(c)(2)
- C. If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, the Department must presume that it is not performing a CUF. 49 CFR § 26.55(c)(3)
- D. When a DBE is presumed not to be performing a CUF as provided in paragraph C (above), the DBE may present evidence to rebut this presumption. 49 CFR § 26.55(c)(4)
- E. The Department's decisions on CUF matters are subject to review by Federal Highway Administration, but are not administratively appealable to USDOT. 49 CFR § 26.55(c)(5)

## **COUNTING RACE/GENDER NEUTRAL DBE PARTICIPATION - 49 CFR § 26.55**

The Department does not count the participation of a DBE subcontractor toward a contractor's final compliance with its DBE obligations on a contract until the amount being counted has actually been paid to the DBE. 49 CFR § 26.55 (h)

The Department will count DBE participation toward our overall annual goal as provided in 49 CFR § 26.55 as noted below.

1. The Department will use the following factors in counting DBE trucking participation.
  - A. For purposes of this section, a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE. 49 CFR § 26.55(d)(7)

- B. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract. 49 CFR § 26.55(d)(1)
- C. The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract and receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs. 49 CFR § 26.55(d)(2-3)
- D. The DBE may lease trucks and drivers from another DBE firm and receives credit for the total value of the transportation services the lessee DBE provides. 49 CFR § 26.55(d)(4)
- E. The DBE may also lease trucks with drivers and is entitled to credit for the total value of transportation services provided by non-DBE leased trucks equipped with drivers not to exceed the services under items 1C and 1D. Additional participation by non-DBE owned trucks equipped with drivers receives credit only for the fee or commission it receives as a result of the lease arrangement. 49 CFR § 26.55(d)(5)

Example to 1D: DBE Firm X uses two of its own trucks on a contract. It leases two trucks with drivers from DBE Firm Y and six trucks with drivers from non-DBE Firm Z. DBE credit would be awarded for the total value of transportation services provided by Firm X and Firm Y, and may also be awarded for the total value of transportation services provided by four of the six trucks provided by Firm Z. In all, full credit would be allowed for the participation of eight trucks. DBE credit could be awarded only for the fees or commissions pertaining to the remaining trucks Firm X receives as a result of the lease with Firm Z.

- F. The DBE may lease trucks without drivers from a non-DBE truck leasing company and if the DBE uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.

Example to paragraph 1F: DBE Firm X uses two of its own trucks and drivers on a contract. It leases two additional trucks and drivers from non-DBE Firm Z. Firm X uses its own employees to drive the trucks leased from Firm Z. DBE credit would be awarded for the total value of the transportation services provided by all four trucks. 49 § 26.55(d)(6)

- 2. Only the value of the work actually performed by the DBE counts toward the project goal when a DBE participates in a contract provided the DBE is certified in this work.
  - A. The Department counts the entire amount of that portion of a construction contract, or other contract not covered by item 2. B, that is performed by the DBE's own forces. Included are the cost of supplies and materials obtained by the DBE for the work of the contract, including supplies purchased or equipment leased by the DBE (except supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate). 49 CFR § 26.55 (a)(1)
  - B. The Department counts the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service for which they are certified, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a USDOT-assisted contract, toward DBE goals, if the Department determines the fee to be reasonable and not excessive. 49 CFR § 26.55 (a)(2)
  - C. When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor is also a DBE. 49 CFR § 26.55 (a)(3)
- 3. The Department counts expenditures with DBEs for materials or supplies toward DBE goals as provided in the following:
  - A. If the materials or supplies are obtained from a DBE manufacturer, count 100% of the cost of the materials or supplies toward DBE goals. 49 CFR § 26.55 (e)(1)(i)
  - B. If the materials or supplies are purchased from a DBE regular dealer, count 60 percent of the cost of the materials or supplies toward DBE goals. 49 CFR § 26.55 (e)(2)(i)
  - C. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of 3B (above) 49 CFR § 26.55 (e)(2)(ii)(C)
  - D. With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE goals, if the Department determines the fees to be reasonable and not excessive. Do not count any portion of the cost of the materials and supplies themselves toward DBE goals, however.

49 CFR § 26.55 (e) (3)

- E. The Department determines the amount of credit awarded to a firm for the provisions of materials and supplies (e.g., whether a firm is acting as a regular dealer or a transaction expeditor) on a contract-by-contract basis. 49 CFR § 26.55 (e)(4)
- 4. If a firm is not currently certified in ND at the time of the execution of the contract, the Department does not count the firm's participation toward any DBE goal. 49 CFR § 26.55 (f)
- 5. The Department does not count the dollar value of work performed under a contract with a firm after it has ceased to be certified toward the Department's overall annual goal. 49 CFR § 26.55 (g)

## **DEFINITIONS**

The definitions specified below apply only to this Special Provision and may contain differences from NDDOT Standard Specifications.

**Achievement** means any DBE certified service dollar amount committed to at the time of award. Any achievement must be supported by a request to sublet and Monthly DBE Payment Records for each DBE.

**Aggregate providers** are considered subcontractors rather than regular dealers/suppliers, regardless of the amount of their quote.

**Apparent low bidder (ALB)** means the bidder whose bid is read as low bid at the bid opening.

**Bid Opening Sign-In System** means the Department's online system to which all prime contractors and subcontractors must register to indicate their interest in quoting or bidding prior to each bid opening.

**Bidder** means a contractor intending to serve as the prime contractor for highway construction projects.

**Blanket quote** means when a business provides the same quote, for all projects, at a bid opening, using the same price at one rate, which is not project specific. Blanket quotes for the construction season are not allowed, i.e. trucking, striping, signing, construction supplies, etc.

**Commercially Useful Function (CUF)** describes a DBE's responsibilities and involvement in a project, see section Commercially Useful Function of this SP.

**Commitment** means the dollar amount of work the DBE will complete as stated in the bidder's proposal.

**Contractor** means all DBE and non-DBE firms, including prime contractors, brokers, vendors, regular dealers/suppliers, and manufacturers at any tier.

**DBE Goal** means a percentage of the total contract targeted for the hiring of DBE subcontractors to do specific bid items for which the DBE has been certified to perform. Project goals are set by assessing the project's bid items, location, whether DBEs are available to do the work.

**DBE Participation** means the percentage achieved when the dollar amount committed to the DBE is divided by the dollar amount of all contract items.

**DBE Participation Review** summarizes the prime's participation at the time of award. A replacement approval request must be submitted to substitute a firm for any DBEs reported as being used at the time of award.

**Department** means the project owner regardless of whether the owner is NDDOT, a city or a county project.

**Disadvantaged business enterprise or DBE** means a for-profit small business concern that is certified by the Department and listed in the DBE Directory available on the Department's web site. DBEs must first be certified in the work intended before any DBE achievement may be counted toward the project goal.

**Equipment supplier** is a firm which provides equipment for sale or lease, without operators, and whose primary business function is equipment sales or leasing.

**Manufacturer** means a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications. 49 CFR § 26.55 (e) (1) (ii)

**Materials** means aggregate, steel, petroleum products, concrete, asphalt, and other construction supplies.

**NAICS Codes** means industry codes assigned by North American Industry Classification System. When certified, DBE businesses are assigned NAICS codes which are identified in the DBE Directory.

**NDDOT Certification & Compliance System (CCS)** refers to the online compliance reporting system whereby contractors report/submit job related payments, commitments, and Utilization Plan documentation.

**Positive Contact** means active and documented solicitation of DBE and other subcontractors. Advertising the prime's intention to bid, using the Contractor sign in to notify DBEs and other subcontractors of the jobs the prime is interested in, and contacting individual DBEs is deemed positive contact.

**Prime contractor** means bidders who are submitting proposals on this project, regardless of the size of the project.

**Project owner** means any political subdivision such as a city or county which provides match to federal highway funds and uses NDDOT's electronic bidding system to let their projects to bid. The Department "owns" state projects.

**Quoter** means DBE or a non-DBE subcontractors, brokers, vendors, regular dealers/suppliers, and manufacturers at any tier who submits quotes to another contractor.

**Race/Gender Neutral (RGN)** means a zero (0) percent goal that is used to assist all small businesses. Please note, NDDOT intends to achieve its overall DBE goals via RGN means; 3.47 percent is the Department's RGN goal.

**Responsible Bid Proposal** means a bidder's proposal in which the project goal has been achieved, or the bidder demonstrates Good Faith Efforts (GFE) as outlined in this Special Provision timely.

**Subcontractor** means any firm intending to perform work, or intending to perform work and supply the materials, which were intended for their work on the project. All subcontractors must attach a list of DBE subcontractors intended for use to their quote when submitting it to the prime contractor.

**Supplier** means a party providing goods, services, and supplies on the project.

**Broker** means an agent who, without having custody of the property, a) negotiates contracts of purchase, work, lease, or sale; b) buys and sells goods; or c) negotiates between buyers and sellers. See Counting DBE Participation section.

**Regular Dealer** means a DBE firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials supplies, articles, or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. See Counting DBE Participation section.

**Tier** means various levels of contractors on the job. For example a prime contractor's subcontractor (B) is referred to as the second tier. When B subcontracts with C, C becomes the third tier, etc.

**Tied quote** means the quote will be considered only if all of the bid items are included.

**Untied quote** means that any item or group of items quoted may be used for price noted on the quote whether one or all are used.



**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION  
EEO AFFIRMATIVE ACTION REQUIREMENTS**

**March 15, 2014**

Bidders shall become familiar with the following requirements and be prepared to comply in good faith with all of them:

**APPENDIX A**

Notice or Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246).

1. The Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:
  - a. Goals for Female Participation in Each Trade – Statewide . . . . .6.9%
  - b. Goals for Minority Participation in Each Trade by County:  
Barnes, Cass, Dickey, Eddy, Foster, Griggs, LaMoure, Logan,  
McIntosh, Ransom, Richland, Sargent, Steele, Stutsman, Traill . . . . .0.7%  
  
Grand Forks . . . . .1.2%  
  
Benson, Cavalier, Nelson, Pembina, Ramsey, Towner, Walsh . . . . .2.0%  
  
Burleigh, Morton . . . . .0.4%  
  
Adams, Billings, Bowman, Dunn, Emmons, Golden Valley, Grant,  
Hettinger, Kidder, Mercer, Oliver, Sheridan, Sioux, Slope, Stark, Wells . . .1.3%  
  
Bottineau, Burke, Divide, McHenry, McKenzie, McLean, Mountrail,  
Pierce, Renville, Rolette, Ward, Williams . . . . .4.4%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR 60-4 shall be based on its implementation of the Equal Opportunity Clause specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3 (a),

and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall notify the Office of Federal Contract Compliance Programs, in writing, within ten working days of award of any subcontract in excess of \$10,000. The notification shall include the name, address, and telephone number of the subcontractor and their employer identification number; dollar amount of the contract, estimated starting and completion dates of the contract; the contract number; and geographical area in which the contract is to be performed.

Notification should be sent to:

U.S. Department of Labor/ESA  
OFCCP  
Denver District Office  
1244 Speer Boulevard  
Denver, Colorado 80202  
Phone: 720-264-3200  
Fax: 720-264-3211

4. As used in this "Notice" and in the contract for this project, the "covered area" is the State of North Dakota.

## **APPENDIX B**

Standard Federal Equal Employment Opportunity Construction Contract Specifications  
(Executive Order 11246)

1. As used in these specifications:
  - a. "Covered area" means the geographical area described in the proposal from which this contract resulted.
  - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority.
  - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
  - d. "Minority" includes:

- (1) Black (all persons having origins in any of the Black African racial groups, not of Hispanic origin);
  - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish Culture or origin, regardless of race);
  - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
  - (4) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation of community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the proposal from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted

in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor. (Training programs approved by the North Dakota Department of Transportation are recognized by the U.S. Department of Labor.)

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
  - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all Foremen, Superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  - b. Establish and maintain a current list of minority and female recruitment sources; provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its union have employment opportunities available, and maintain a record of the organization's responses.
  - c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union, or if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
  - d. Provide immediate written notification to the Director when the union with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
  - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to

the sources compiled under 7b above.

- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the Company newspaper, annual report, etc., by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the Company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the Company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing it with the Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minorities and women, and where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's work force.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring

- all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and Company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
  - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction Contractors and Suppliers, including circulation of solicitations to minority and female Contractor associations and other business associations.
  - p. Conduct a review, at least annually, of all Supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligation.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a Contractor association, joint Contractor- union, Contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. Goals for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minorities, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termina-



tion, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment-related activity to ensure that the Company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation, if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form, however, to the degree that existing records satisfy this requirement, Contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION  
APPENDIX A OF THE TITLE VI ASSURANCES**

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees as follows:

1. Compliance with Regulations: The Contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, the Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the Contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Recipient or the Federal Highway Administration as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

- a. withholding payments to the Contractor under the contract until the Contractor complies; and/or
- b. cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.



**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION  
APPENDIX E OF THE TITLE VI ASSURANCES**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

**Pertinent Non-Discrimination Authorities:**

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).

## **NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**

### **SPECIAL PROVISION**

#### **CARGO PREFERENCE ACT (CPA)**

##### **DESCRIPTION**

The Federal Highway Administration (FHWA) in partnership with the Federal Maritime Administration (MARAD) has mandated the implementation of 46 CFR 381 making the cargo preference requirements applicable to the Federal Aid Highway Program.

The requirements of this Special Provision apply to items transported by ocean vessel.

##### **CONTRACT REQUIREMENTS**

###### **A. General**

Utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. Gross tonnage is computed separately for dry bulk carriers, dry cargo liners, and tankers.

Furnish a legible, English language copy of a rated 'on-board' commercial ocean bill-of-lading for each shipment of cargo described in the previous paragraph. Furnish the bill-of-lading within 20 days following the date of loading for shipments originating in the United States and within 30 working days following the date of loading from shipments originating outside the United States.

Furnish bills-of-lading to the Engineer and to the following:

Division of National Cargo  
Office of Market Development  
Maritime Administration  
Washington, DC 20590

###### **B. Subcontracts**

Include the language in Section "A, General" of this Special Provision in all subcontracts issued pursuant to this contract.

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

### ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### **10. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## **2. Withholding**

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## **3. Payrolls and basic records**

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### **4. Apprentices and trainees**

##### **a. Apprentices (programs of the USDOL).**

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

##### **b. Trainees (programs of the USDOL).**

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.



d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

## VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

## **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## **X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

### **1. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

## **2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

## **2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**CONTRACT SPECIAL PROVISION  
MANDATORY USE OF  
AUTOMATED CERTIFIED  
PAYROLL**

**All contractors** on NDDOT federal-aid projects, including city/county projects, must file weekly Certified Payrolls, as required under Davis-Bacon and Related Acts (DBRA). **The NDDOT requires the use of LCPtracker, a paperless online system for entering and filing these certified payrolls. Certified payrolls in paper form will no longer be accepted, and all contractors must file their payroll electronically.**

After award, the Prime Contractor (Prime) must:

1. Designate an individual as Prime Approver for the project. The Prime Approver will oversee DBRA payroll for all subcontractors of all tiers on the project. A contractor may inform the NDDOT Civil Rights Division (CRD) that the same individual will be Prime Approver on all projects. CRD will set up the Prime Approver Account for the project. Thereafter, the Prime Approver will have the responsibility to use the Account to approve all payroll on the project. Until payroll is approved by the Prime Approver, it cannot be viewed by the NDDOT and it is not deemed submitted to the NDDOT.
2. The prime contractor has the responsibility to assign subcontractors within the LCPtracker system to the project and to ensure that all subcontractors are aware of the necessity to file payrolls electronically and are set up within the system. Any subcontractor not on Approved Subcontractor List or the Qualified Contractor List must register and be placed on one of these lists before entry of the subcontractor into LCPtracker. These lists may be found at <https://www.dot.nd.gov/pacer/qualified.htm> and <https://www.dot.nd.gov/pacer/registered.htm>. Only Prime Approvers or the CRD may enter subcontractors into LCPtracker.
3. The prime contractor has the responsibility to see that all required payrolls are filed by subcontractors of all tiers. If payroll is rejected or project staff otherwise requests a correction of payroll by any subcontractor on the project, the prime contractor has a responsibility to see that corrected payroll is submitted.
4. For further information on certified payroll, go to the NDDOT Labor Compliance/LCPtracker page at <https://www.dot.nd.gov/divisions/civilrights/laborcompliance.htm>. On this page, contractors will find a Getting Started on LCPtracker Guide and a Prime Approver Guide. Recorded trainings are also available on this page for both contractors and prime approvers. Contractors can obtain an LCPtracker user name and password by calling the NDDOT Civil Rights Division at (701) 328-2605 or (701) 328-2576.

09/06/2017

**CONTRACT SPECIAL PROVISION**  
**MANDATORY USE OF ONLINE**  
**DBE PROJECT PAYMENT REPORTING**

Payments made to all tiers of subcontractors must be reported electronically using the B2GNow system. Paper forms (Monthly Record of DBE Project Payments – SFN 60638) will no longer be accepted.

After award, the Prime Contractor (Prime) must:

1. Create a new account if not already in the system. Create a user for each employee who will use the system. If there is no account already set up, you can email Customer Support directly from the Account Lookup page. Your email address will be your user ID. Customer Support will email you with the information you need to log in.
2. Once the project has been awarded and the Utilization Plan (UP) has been created in the system and assigned to the contractor it must be filled out and submitted. An automated email message will be sent to a designated individual within the company alerting them that a UP is pending. Log into the system using the link provided in the email. For each contract the Prime must add all DBE and non-DBE subs being used on the project. When all information has been provided submit the UP. Civil Rights will review the UP and if everything is in order it will be approved. If changes need to be made the UP will be returned to the contractor and they will have 7 days to make the necessary adjustments and resubmit. If DBE or non-DBE subcontractors are added after the initial UP is set up the Prime can submit a request for them to be added.
3. Once the UP is submitted the project is “locked in” after Financial Management has processed the project in their system. After a UP is locked in payments from NDDOT to the Prime are reported through the system. The Prime must start reporting DBE and non-DBE subcontractor payments through the system in accordance with prompt pay guidelines outlined in the contract.
4. A user manual for UP’s and recording project payments is available to the contractors within the system. After login they can go to View>>My Utilization Plans and they will find the guide on the top of the Utilization Plan screen. They do not have to have a current UP assigned to them to see this guide. The guide is also on the actual UP page when a UP is assigned to them.
5. For further information on the Certification and Compliance System, go to the NDDOT Civil Rights page at <https://www.dot.nd.gov/divisions/civilrights/civilrights.htm>. There is various training available on a regular basis, to sign up for training go to the main Certification and Compliance System page and click the “Training and Events” box. Contractors that need to obtain an account or need subcontractors set up within the system should call the NDDOT Civil Rights Division at (701) 328-3116 or email [civilrights@nd.gov](mailto:civilrights@nd.gov)

10/3/2017



## NOTICE:

Electrical work done outdoors on highway construction projects is covered by the Line Construction rates rather than Electrician rates. When electrical work is performed on or within a commercial building only, such as a rest area, the job classification Electrician is to be used. Any other electrical work on a federal-aid highway construction project in North Dakota is covered by the line construction rates. The minimum wage and fringe amount stated in the attached wage determination within this proposal is required for such classification.

**Apprentices in Line Construction:** Apprentices in Line Construction must be classified and paid as Apprentice Linemen with a percentage of journeyman's pay that reflects the apprentice's progress level of training. Additionally, they must be enrolled in a bona fide lineman Apprentice Program regardless if they are also enrolled in an indoor Electrical Apprentice Program.

Electrical work may not be done by any Laborer classification under the ND Century Code. The Group 2 Laborer, Conduit Layer may only handle low voltage data or telephone lines and may not install or handle electrical conduit.

For assistance or questions concerning Davis-Bacon Wages and Requirements, go to:

<https://www.dot.nd.gov/manuals/civilrights/davisbacon.pdf>

Or contact:

Civil Rights Division  
North Dakota Department of Transportation  
608 East Boulevard Avenue  
Bismarck, ND 58505-0700  
Phone: 701-328-2605      Email: [civilrights.nd.gov](mailto:civilrights.nd.gov)

NDDOT's *Davis-Bacon Wage and Payroll Requirements Handbook* is available at:  
[www.dot.nd.gov/manuals/civilrights/davisbacon.pdf](http://www.dot.nd.gov/manuals/civilrights/davisbacon.pdf)

## U.S.DEPARTMENT OF LABOR

STATE	COUNTY	20200037	Page 1
NORTH DAKOTA	STATEWIDE	DATE OF DECISION 1-3-20	
		Revised 2-07-2020 (Mod. No. 1) Revised 2-28-2020 (Mod. No. 2) Revised 3-05-2020 (Mod. No. 3) Revised 3-20-2020 (Mod. No. 4) Revised 8-28-2020 (Mod. No. 5)	

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W/Pensions	Vacation	App. Tr.	Others
<b>CARPENTERS</b>	\$29.85	\$ 7.35			
<b>CEMENT MASONS/FINISHERS</b>	29.85	7.35			
<b>LINE CONSTRUCTION:</b>					
Lineman	43.50	5.75 + 29%			
Cable Splicer	43.50	5.75 + 29%			
Line Equipment Operator	36.93	5.75 + 29%			
Groundman	24.62	5.75 + 29%			
<b>ELECTRICIANS:</b>					
Electrician	34.92	11.40 + 11.5%			
Cable Splicer	36.67	11.40 + 11.5%			
(Adams, Billings, Bottineau, Bowman, Burke, Divide, Dunn, Emmons, Golden Valley, Grant, Hettinger, McHenry, McKenzie, Mclean, Mercer, Mountrail, Oliver, Pierce, Renville, Rolette, Sheridan, Sioux, Slope, Ward and Williams Counties)					
Electrician	36.36	10.80 + 11.5%			
Cable Splicer	37.94	10.80 + 11.5%			
(Barnes, Benson, Cavalier, Dickey, Eddy, Foster, Grand Forks, Griggs, Kidder, La-Moure, Logan, McIntosh, Nelson, Pembina, Ramsey, Ransom, Richland, Sargent, Steele, Stutsman, Towner, Traill, Walsh, and Wells Counties)					
Electrician	34.70	11.40 + 11.5%			
Cable Splicer	34.64	11.40 + 11.5%			
(Burleigh, Morton and Stark Counties)					
Electrician					
(Cass County)	14.72	3.40			
<b>WELDERS:</b>					
Receive rate prescribed for craft performing operation to which welding is incidental					
<b>LABORERS:</b>					
<b>Group 1</b>					
General Construction Laborers :Sack Shaker (cement and mineral filler), pipe handler, drill runner tender, salamander heater and blower tender, light truck, pickup driver, flaggers and pilot car drivers	21.90	2.90			

01-03-2020

Revised 8-28-2020 (Mod. No. 5)

Page 2

All Cranes 21 tons and up to 59 tons; Backhoe Operator 3 CY. and over; Creter Crane; Dredge Operator 12' and over; Equipment Dispatcher Equipment Dispatcher, Finish Motor Grader; Front End Loader Operator 8 CY. and over.; Master Mechanic (when supervising 5 or more Mechanics), Mon-O-Rail Hoist Operator, Power Shovel up to and including 3-1/2 CY. and Tugboat

Basic Hourly Rates	Fringe Benefits Payments			
	H & W/Pensions	Vacation	App. Tr.	Others
\$22.15	\$ 2.90			
22.30	2.90			
23.05	2.90			
30.45	17.20			
29.05	17.20			

**01-03-2020**

Revised 8-28-2020 (Mod. No. 5)

Page 3

Articulated/Off Road Hauler; Asphalt Dump  
Person; Asphalt Paving Screen Operator;  
Backhoe, up to and including 1/2 CY; Boring  
Machine Locator; Console Board Operator;  
Distributor Operator (Bituminous); Forklift  
Operator; Front End Loader, 1-1/2 CY up to  
and including 3 CY; Grade Person; Grave  
Screening Plant Operator (not Crushing or  
Washing); Greaser; Lazar Screed Operator;  
longitudinal Float and Spray Operator; Micro  
Surfacer Machine; Motor Grader Operator  
(Haul Roads); Paving  
Breaker Hydro Hammer Type; Pugmill  
Operator; Push Tractor; Roller, Steel and  
Rubber on Hot Mix Asphalt Paving; Rotomill  
Machine (Surface Planer), up to and including  
42"; Rumble Strip Machine; Sand and Chip  
Spreader, Self-Propelled Sheepsfoot Packer  
with or without Blade Attachment;  
Self-Propelled Traveling Soil Stabilizer;  
Sheepsfoot

**LABOR RATES****Page 4 of 4****01-03-2020**

Revised 2-07-2020 (Mod. No. 1)

Revised 2-28-2020 (Mod. No. 2)

Revised 3-05-2020 (Mod. No. 3)

Revised 3-20-2020 (Mod. No. 4)

Revised 8-28-2020 (Mod. No. 5)

**ND20200037**

Page

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W/Pensions	Vacation	App. Tr.	Others
POWER EQUIP. OPERATORS: (CONT.)					
Group 4 (cont.)					
Packer with Dozer Attachment 100 H.P. and over; Shouldering Machine; Slip Form, Curb and Gutter Operator, Slurry Seal Machine; Tamping Machine Operator; Tie Tamper and Ballast Machine; Trenching Machine Operator, 46 H.P. up to and including 99 H.P.; Truck Mechanic; Tub Grinder; Well Points; Fuel/Lube Operator	28.65	\$17.20			
Group 5					
Boom Truck, A-Frame or Hydraulic 2 tons up to and including 7 tons; Broom Self-Propelled; Concrete Saw (power operated); Cure Bridge Operator; Front End Loader Operator, less than 1-1/2 CY; Mobile Cement Mixer; Power Actuated Auger and Horizontal Boring Machine Operator, up to and including 5"; Roller (on other than hot mix asphalt paving); Oilers; Vibrating Packer Operator (Pad Type) (Self-Propelled); Water Spraying Equipment, Self-Propelled; Skidsteer Operator with attachments	27.80	17.20			
Group 6					
Brakeman or Switchman; Curb Machine Operator (Manual); Dredge or Tugboat Deckhand; Drill Truck Gravel/Testing Operator; Form Trench Digger (Power); Gunite Operator; Gunall; Paint Machine Striping Operator; Pickup Sweeper, 1 CY and over Hopper Capacity; Scissor Jack (Self-Propelled) Platform Lift; Straw Mulcher and Blower; Stump Chipper Operator; Tractor Pulling Compaction or Aerating Equipment; Trenching Machine Operator, up to and including 45 H.P.; Assistant/Apprentice Operator	26.50	17.20			
TRUCK DRIVERS:					
Single-Axle Truck	28.82	13.85			
Tandem- and Tri-Axle Truck	28.94	13.85			
Tandem- and Tri-Axle Semi	29.25	13.85			
Lowboy	29.25	13.85			
Off Road Heavy Duty End Dumps, 20 Yards and Under	29.25	13.85			
Euclid, Over 20 Yards	30.77	13.85			

Unlisted classifications needed for work not included within the scope of the classifications listed may be added alter award only as provided in the labor standards contract clauses [29 CFR, 5.5 (a) (1) (ii)].

# NORTH DAKOTA DEPARTMENT OF TRANSPORTATION (NDDOT)

## 2017 ON-THE-JOB TRAINING PROGRAM SPECIAL PROVISION

The bidder's signature on the proposal sheet indicates the bidder agrees to take part in the On-the-Job Training (OJT) Program and to follow the OJT Program Manual and Special Provision. Contractors that fail to do so will be subject to suspension of progress payments or sanctions up to and including revocation of bidding privileges.

OJT is training conducted in a highway construction work environment designed to enable minority, female, and economically disadvantaged individuals to learn a bona fide skill and qualify for a specific occupation through demonstration and practice.

After a training program and trainee candidate have been approved, the contractor begins training its regular employee according to the approved program. The goal of this training is to retain the trainee as a permanent employee. OJT involves individuals at the entry level. Training is designed to help participants reach their fullest potential and become self-sufficient in the job.

### I. POLICY STATEMENT

The purpose of the OJT Program is to provide training in the highway construction industry for minority, female, and economically disadvantaged individuals, from this time known as the targeted group. Pursuant to 23 Code of Federal Regulations Part 230, Subpart A, Appendix B - Training Special Provisions, this program provides for on-the-job training aimed at developing journey-level workers in skilled trades.

The Contractor shall take all necessary and reasonable steps to ensure that minorities and women have the opportunity to compete for and participate as trainees or apprentices and to develop as journey-level workers employed in the skilled trades.

Contractors should select a training program(s) based on their company's employment/staffing needs as stated in the OJT Program Manual.

### II. INTRODUCTION/PROGRAM BACKGROUND

The OJT Program was originally prepared through the cooperative efforts of the Associated General Contractors of North Dakota (AGC); the Federal Highway Administration (FHWA); the North Dakota Department of Transportation (Department); and, other program stakeholders.

Successful operation of the OJT Program requires contractors to follow uniform and basic training procedures, keep records of trainee progress, and report each trainee's completion or termination.

### III. ASSIGNED OJT POSITIONS

A. Trainee positions are assigned contractors based only on federal highway dollars awarded from October 1 to September 30. Trainee assignments are not project specific; that means the contractor may train program participants on any project where training opportunities exist.

The number of trainee positions assigned will be determined by formula based on calculations involving particular project specification numbers on applicable projects. The types of projects NOT applicable in the calculation to assign trainee positions are:

- County-only or state-only funded projects
- Emergency relief, concrete pavement repair (CPR), electrical, rest area, signing, striping projects
- Projects subject to Tribal Employment Rights Ordinances (TERO)
- Projects not let through NDDOT bid openings

- B. Contractors will receive the number of positions assigned and links to resources necessary for completion of program requirements via email.
- C. The number of trainee positions assigned to each contractor will increase proportionately, as shown below, for any applicable federally funded projects awarded to them.

For all federal highway dollars awarded from October 1 to September 30:

6,000,000 to 15,000,000	1	trainee
15,000,001 to 23,000,000	2	trainees
22,000,001 to 31,000,000	3	trainees
31,000,001 and above	4	trainees

A maximum of four (4) trainee positions in a federal fiscal year will be assigned to any prime contractor regardless of dollar amount. Carryover positions from a prior construction season are not included in the four trainee maximum, e.g., a contractor with one carryover and four assigned positions may have a total five trainees.

Failure to follow this OJT Special Provision and the accompanying OJT Program Manual may result in suspension of progress payments or sanctions up to and including revocation of bidding privileges.

#### IV. FUNDING

The Department will establish an OJT fund annually from which contractors may bill the Department directly for eligible trainee hours. The funds for payment of trainee hours on federal-aid projects will be made available based on 23 USC 504(e) to a maximum of \$100,000. The funds for payment of trainee hours on state-aid only projects will be allocated to a maximum of \$10,000.

#### V. ONLINE RESOURCES

*OJT Program Manual:* Includes program requirements, wage rates, and curriculum:  
<https://www.dot.nd.gov/divisions/civilrights/docs/ojtprogram.pdf>

*SFN 60226 Request for On-the-Job Training Program and Trainee Approval:*  
<http://www.dot.nd.gov/forms/sfn60226.pdf>

*SFN 51023 Voucher for On-the-Job Training Program Hourly Reimbursement:*  
<http://www.dot.nd.gov/forms/sfn51023.pdf>

Davis-Bacon and Related Acts (DBRA) Handbook: <https://www.dot.nd.gov/manuals/civilrights/davisbacon.pdf>

#### VI. APPROVALS REQUIRED

- A. Requests for Training Programs and Trainee Approvals must be submitted to Civil Rights Division (CRD). Contractors must request and receive program and trainee candidate approval in order to pay trainees less than the established Davis-Bacon wage for the job classification concerned. No training program hours will count toward the fulfillment of an assigned trainee position or be eligible for reimbursement without prior approval. No retroactive approval will be granted.
  - 1. Submit *SFN 60226 Request for On-the-Job Training Program and Trainee Approval* with each trainee's employment application. <http://www.dot.nd.gov/forms/sfn60226.pdf> and the pre-approved training curriculum for each trainee position assigned by April 1 or within fifteen (15) calendar days of notification of any additional position assignments.
  - 2. Submit *SFN 7857 Application for Eligibility*, Job Service North Dakota (JSND) approval of an economically disadvantaged individual for participation in the OJT Program.

- B. Pre-approved curriculum: NDDOT's OJT Program Manual contains pre-approved training curriculum for a number of skilled trade positions. Contractors should select a training program(s) based on their company's employment/staffing needs.
- C. Customized curriculum: To request a training curriculum not included in the pre-approved curriculum, submit a written request for approval by NDDOT and FHWA.

The request must include:

- A training curriculum, including the classification requested, minimum number of hours required, and type of training the individual will receive to achieve journey-level worker status.
- A minimum wage scale.

If approved, each new classification must comply with the provisions specified in the OJT Program Manual. No hours worked prior to approval will be credited toward completion of the customized training program. Training programs for classifications not covered by the Davis-Bacon and Related Acts (DBRA) will be considered on a limited basis.

The contractor may commence its "customized" training as of the date of the written approval.

- D. Union apprenticeship and on-the-job training programs registered with the Bureau of Apprenticeship and Training (BAT), U.S. Department of Labor, may be used for trainee positions assigned under the OJT Program, provided the trainees or apprentices are minority, female, or economically disadvantaged. Nonminority males not certified as economically disadvantaged may only be used when the contractor has requested and received approval, from the Department, for additional trainee positions. The apprenticeship indenture agreements serve as the trainee's job application and must be provided prior to any hours being credited toward OJT Program completion.
- E. Power Equipment Operators:

The contractor may train an individual on a combination of equipment if each piece of equipment falls within the same groups of power equipment operators identified in the training curricula (groups 1-3 and groups 4-6). These power equipment operator groups are referenced to the federal DBRA wage rates contained in the contract proposal. As an example, a "utility operator" may receive training on a broom, a front-end loader less than 1½ cubic yards, or other piece of equipment that is used around a paver if each piece falls within either groups 1-3 or groups 4-6. When multiple wage rates apply, the trainee's wage will be based on the equipment being operated at the time or on the highest of the applicable wage rates.

Use of the classification "pickup machine operator (asphalt dump-person)" as a group 4 power equipment operator is considered standard industry practice. The classification is defined as: "Operates the controls on the pickup machine that runs in front of the paver, trips the levers on the dump trucks, and balances the loads for the paver. The pickup machine operates on similar principles as a shouldering machine."

- F. Contractors not qualifying for the OJT Program, or contractors desiring to train more than the allotted number of trainees, may apply to the Department for additional trainee positions. Approval of additional positions will be at the sole discretion of the Department. The Department will take into consideration whether there is enough work for the trainee to successfully complete the curriculum and whether the contractor will be exceeding the allowable ratio of trainees to journey-workers (generally considered to be one trainee or apprentice to every three to five journey-workers).

The additional positions may be filled by individuals outside of the targeted groups. The contractor may pay the reduced training rates to additional trainees outside of the targeted groups, but will not receive hourly reimbursement for any individuals who are outside the targeted groups.

## VII. NDDOT'S RESPONSIBILITIES

- A. The NDDOT OJT supportive services (OJTSS) consultant will monitor excerpts from the weekly certified payrolls submitted with the monthly vouchers for reimbursement. This includes weekly payrolls from



contractors working on state funded only projects. On contracts where certified payrolls are not required and not available for supporting documentation, contractors may enter trainee wages, hours in training, and the project control number(s) (PCN) in a spreadsheet to support their reimbursement vouchers. In this case, contractors should work with OJTSS to assure that all information required for payment is provided. The OJTSS consultant will assess when the trainees have completed the specified number of hours and their wages are increased accordingly. The OJTSS consultant will also assure that applicable fringe benefits are paid either directly to the trainees or for the trainee into approved plans, funds, or programs.

- B. The OJTSS consultant is charged with visiting trainees and monitoring their progress under the OJT Program. To facilitate the on-site visits, the OJTSS consultant will contact contractors for the location of the trainees weekly.

## VIII. CONTRACTOR'S RESPONSIBILITIES

- A. Consistently demonstrate efforts to recruit, hire, and train candidates for the OJT Program.
- B. Assign each trainee to a particular person—either a supervisor or an employee proficient in the skills to be trained—who shall see that the trainee is given timely, instructional experience. This person must be familiar with the OJT Program, keep proper records, and ensure completion of the required training hours in accordance with the training curriculum.
- C. Appoint a company employee who will be available and responsive to weekly contacts by the OJTSS consultant. OJTSS monitors the status of assigned trainee positions (e.g., program and trainee approvals, trainees' progress, etc.). The OJTSS consultant will contact the individual listed on the company's approved SFN 60226 Request for OJT Trainee Approval. This person must reply to communications from the Department and the OJTSS consultant in a timely manner.
- D. Make trainees available to the OJTSS consultant for at least two on-site visits during the construction season.
- E. Make the trainer and project superintendent available to the OJTSS consultant for at least two on-site visits each construction season.
- F. Make trainees aware they are formally enrolled in the OJT program.
- G. Identify trainees on the payroll excerpts, for example: "grp. 4 roller operator trainee." This includes trainees in job classifications not covered by DBRA. Handwritten notes are appropriate for identification.
- H. Notify the Department when a trainee completes the number of hours required to graduate from the OJT Program. The Department will issue the trainee a certificate of completion and a wallet-sized card as proof of the graduate's successful training program completion.
- I. Notify the Department to "propose graduation" or discontinue the training period of a trainee who has completed 90% or more of their hours and thereafter advance the trainee to journey-worker status.
- J. Elect to upgrade proficient trainees from one power equipment operator group or truck driver group to another, with the approval of CRD. Fewer hours are required to complete the upgraded position.

Minimum number of hours required:

Power Equipment Operator Groups 4-6 to Groups 1-3 = 400 hrs.  
Class C Truck Driver to Class B = 200 hrs.  
Class B Truck Driver to Class A = 200 hrs.

Depending on the variety of experience the trainee has gained under the previous curriculum, the difference in the hours may be deducted from the actual operation of the piece of equipment or truck. The contractor will need to review the trainee's past performance in order to make this determination.

- K. May hire commercial driver's license (CDL) holders as truck driver trainees. Those having over-the-road driving experience, with little or no highway construction experience, may be considered to have completed

the Class C truck driver training curriculum and, therefore, are eligible to be upgraded to a Class B truck driver trainee, with the approval CRD.

- L. May transfer trainees from one project to another in order to complete the OJT Program. If transfers are made, CRD must be notified and provided with the name of the trainer. The training hours will count toward overall OJT Program completion.
- M. May train trainees on municipal, private, out-of-state projects or other non-highway work. These training hours must be paid at the OJT minimum wage scale to count toward their OJT Program completion; however, no program reimbursement will be made for those hours.
- N. May delegate or reassign trainee positions to subcontractors, with the acceptance of the subcontractors and the approval of CRD. The prime contractor must verify that the trainee will be able to accumulate enough hours to complete his or her training program. If approved, the subcontractor must obtain training program and trainee approval from CRD before the trainee begins work under the OJT program. Program reimbursement will be made directly to the prime contractor. The trainee position will remain the responsibility of the prime contractor.
- O. May use trainees on projects subject to TERO requirements as part of the core crew or as part of the skilled labor supplied by the contractor. The training hours will count toward overall OJT Program completion; however, no program reimbursement will be made for those hours unless it is a NDDOT let project.
- P. May not use one trainee to simultaneously fill multiple trainee positions
- Q. May use a trainee on a piece of equipment in groups 1-3 or groups 4-6 for one assigned trainee position, then once that trainee has completed the program, the trainee may be trained on a different piece of equipment in groups 1-3 or groups 4-6 to fulfill a second assigned trainee position. When a trainee is used for a second time within a group, the contractor must pay that trainee at the higher wage rate as described in paragraph B under Wage Rates (page 8).

#### IX. CLASSROOM TRAINING

- A. Classroom training may be used to train employees. Each classroom training curriculum must be pre-approved by CRD if the contractor wishes to count the classroom hours as training hours and be reimbursed.  
  
Submit a proposed classroom training curriculum to CRD for approval. Define the type of training the individual will receive, classroom training curriculum, and the minimum number of hours required. The Department will determine the number of hours of credit each trainee will receive toward their training. No retroactive approval will be granted.
- B. Contractors will be reimbursed for classroom training hours after the trainee has completed 80 hours of work on highway construction projects.
- C. Reimbursement for classroom training will be limited to 60 hours per trainee per construction season. Reimbursement for classroom training required under the NDDOT Transportation Technician Qualification Program will be at the NDDOT discretion.
- D. The minimum wage scale to be used for classroom training will be that of the first federal-aid highway construction project on which the trainee will be employed. If the trainee is already employed on a federal-aid highway construction project, the trainee will be paid in accordance with the minimum wage scale applicable to that project. However, if the first project on which the trainee will be employed is a state funded only contract, the minimum wage scale to be used for the classroom training will be that of the appropriate DBRA wage in effect at the time of award of the state funded contract.

#### X. WAGE RATES

- A. When the contractor is submitting the trainee's hours toward training program, wages paid shall in no case

be less than that of those stated in the approved curriculum. A trainee working on a state funded only project, must be paid the DBRA wage rate in effect at the time of award for the type of work the trainee is performing as a trainee.

- B. The minimum wage rates shall not be less than 80% of the journey-worker rate for the first two quarters of training, 85% of the journey-worker rate for the third quarter, and 90% of the journey-worker rate for the fourth quarter.
- Under the power equipment operator training curricula only, once a trainee has completed a training curriculum in either groups 1-3 or groups 4-6, the contractor may enroll the trainee in another training curriculum on a different piece of equipment in either groups 1-3 or groups 4-6.
  - The minimum wage rate under the trainee's second program shall not be less than 85% of the journey-worker rate for the first two quarters of training, 90% of the journey-worker rate for the third quarter, and 95% of the journey-worker rate for the fourth quarter.
  - For the purpose of the OJT Program, a quarter is 25% of the hours the trainee works toward completion of their approved program. The first two quarters of a 550-hour training curriculum would end after 275 hours, the third quarter after 138 hours, and the fourth after 137 hours.
- C. At any time hours are being attributed toward the completion of the approved training program, trainees shall be paid full fringe benefit amounts, where applicable, in accordance to DBRA requirements.
- D. At the completion of the OJT Program, the trainee shall receive the wages of a skilled journey-worker.

## XI. RECRUITMENT AND SELECTION

- A. Prerequisites:
- Trainees must possess basic physical fitness for the work to be performed, dependability, willingness to learn, ability to follow instructions, and an aptitude to maintain a safe work environment.
- B. Licenses:
- Truck driver trainees must possess appropriate driver permits or licenses for the operation of Class A, B, and C trucks. When an instructional permit is used in lieu of a license, the trainee must be accompanied by an operator who:
1. Holds a license corresponding to the vehicle being operated;
  2. Has had at least one year of driving experience; and
  3. Is occupying the seat next to the driver.
- C. Recruitment:
1. Place notices and posters setting forth the contractor's Equal Employment Opportunity (EEO) Policy and the availability of the OJT Program in areas readily accessible to employees, applicants for employment, and potential employees.
  2. Employ members of the targeted group (minority, female, or economically disadvantaged individuals) for all trainee positions assigned in accordance with the OJT Program. Additional positions requested by the contractor may be filled by individuals outside of the targeted groups.
  3. Conduct systematic and direct recruitment through public and private employee referral sources.
  4. Screen present employees for upgrading to higher skilled crafts. A present employee may qualify as a trainee; however, no work hours will be reimbursed or counted toward program completion prior to training program and trainee approval by CRD.
- D. Selection:
1. Hire and enroll OJT trainee candidates who qualify as an individual in the targeted group.

2. Select a training program(s) based on their company's employment/staffing needs.
3. Individuals in the targeted group having experience in the selected curriculum may be eligible to participate in the OJT Program providing they:
  - Are not or have not been journey-workers in the selected curriculum, and/or
  - Have not been previously trained in the selected curriculum.
4. Non-minority males who are economically disadvantaged must obtain written certification from Job Service North Dakota (JSND) to qualify for the OJT Program. Contractors wishing to hire and enroll economically disadvantaged candidates must provide JSND's certification along with SFN 60226 and the employment application when requesting trainee approval.
  - JSND is the only agency that may certify an individual as economically disadvantaged. If JSND refers the candidate to the contractor, written certification under this category will be provided to the contractor at the time of the interview.
  - Any person wishing to obtain this certification must apply to JSND and complete the Workforce Investment Act Program's Application for Eligibility (SFN 7857). A contractor recruiting a candidate who may qualify must contact the Workforce Investment Act Program Manager at JSND. JSND contacts are also online:  
<http://www.dot.nd.gov/divisions/civilrights/docs/jobservice-workforce-invest-contacts.pdf>

## XII. BASIS OF PAYMENT

- A. Contractors will be paid \$4.00 for each hour of training in accordance with the OJT Program Manual.
- B. Reimbursement will be made directly to the contractor. Complete SFN 51023 Voucher for On-the-Job Training Program Hourly Reimbursement for each trainee. Attach excerpts from the weekly certified payrolls showing the trainee's hours, rate of pay, and how applicable fringe benefits were paid. Excerpts from weekly payrolls are also required for state funded only projects. Vouchers without excerpts from payrolls will not be paid until the excerpts are provided. If the excerpts from the payrolls are not provided within one week, the voucher will not be paid and the trainee's hours will not be credited toward completion.  
<http://www.dot.nd.gov/forms/sfn51023.pdf>
- C. On contracts where certified payrolls are not required and not available for supporting documentation, contractors may enter trainee wages, hours in training, and the project control number(s) (PCN) in a spreadsheet to support their reimbursement vouchers. In this case, contractors should work with OJTSS to assure that all information required for payment is provided.
- D. Submit completed vouchers to CRD for approval and processing by the fifteenth (15<sup>th</sup>) calendar day of every following month the trainee is employed under the OJT Program.

Regardless, all vouchers for trainee hours worked on state funded only projects from July 1 to June 30 must be received by CRD no later than July 15 in order to be reimbursed. All vouchers for trainee hours worked on federally funded projects from October 1 to September 30 must be received by CRD no later than October 15 in order to be reimbursed. This is due to state and federal end-of-the-year budget fiduciary requirements.

## XIII. FAILURE TO PROVIDE THE TRAINING OR HIRE THE TRAINEE AS A JOURNEY-WORKER

- A. The contractor is required to consistently demonstrate efforts to recruit, hire, and train candidates for the OJT Program.
- B. If the contractor does not show in a timely manner good faith efforts to recruit, hire, and train candidates in the targeted group, the Department may withhold progress payments
- C. If payments have been made, the Department will deduct the amount paid from the contractor's progress

payment.

- D. No payment shall be made to a contractor for failure to provide the required training or failure to hire the trainee as a journey-worker when such failure is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this OJT Program Special Provision.
- E. Hiring a trainee to begin training as soon as feasible after start of work is evidence of a contractor's good faith efforts to comply with the OJT Program requirements. Additional evidence supporting a contractor's good faith efforts would be to keep the trainee employed as long as training opportunities exist in the approved work classification or until the trainee has completed his or her training program.
- F. It is not required that all trainees be employed for the entire length of the construction season. A contractor will have fulfilled its responsibilities under this OJT Special Provision if it has provided acceptable training to the number of trainees assigned.

#### XIV. UNFILLED OR INCOMPLETE TRAINEE POSITIONS

- A. By October 1, provide written explanation of the firm's good faith efforts for unfilled or incomplete trainee assignments to CRD. CRD will decide, on a case-by-case basis, whether to carry the assigned positions over to the next construction season.
- B. Positions carried over from the previous construction season must be among the first positions filled at season startup. To notify CRD of the trainee's rehiring, submit *SFN 60226 Request for On-the-Job Trainee Approval*, marking 'Check if Carryover Trainee' in the Approved Training Program section of the form. There is no need for the training position or a returning trainee to be re-approved.
- C. Sanctions, up to and including revocation of bidding privileges, may be imposed on the contractor for failure to provide sufficient explanation and documentation for reasons assigned trainee positions when unfilled or incomplete.

#### XV. DEFINITIONS

Carryover Position: Incomplete trainee position carried forward from a prior program year.

Carryover Trainee: Trainee scheduled to continue training hours under prior year's approved program.

CRD: NDDOT's Civil Rights Division administers the NDDOT On-the-Job Training Program.

Good Faith Efforts: Documentation supporting a contractor's efforts to fulfill the program requirements, e.g., new hires list, advertising examples/locations, current employees reviewed for upgrades, etc.

Journey-worker: A worker employed in a trade or craft who has attained a level of skill, abilities, and competencies recognized within the industry.

OJT Supportive Services (OJTSS): Department contractor providing in-person oversight, support, and guidance to contractors and trainees to increase the effectiveness of approved training programs.

Trainee: A person who receives training through an apprenticeship program or other FHWA approved program.

Trainer/Supervisor: Contractor's employee assigned to train, supervise, and support a trainee.

## NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

### SPECIAL PROVISION

#### TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES

##### 1. GENERAL

Install, maintain and remove appropriate Temporary Erosion and Sediment Control Measures (ESCMs).

##### Definitions:

**A. Temporary Erosion and Sediment Control Measures** are to be installed and maintained before and during the term of the land disturbance activity. These items are removed when permanent erosion and sediment ESCMs are installed.

**B. Permanent Erosion and Sediment Control Measures** are to be installed and maintained once the project is completed so that the applicable permits can be terminated.

In some instances, individual temporary and permanent erosion and sediment ESCMs for a site may consist of identical ESCMs. In these cases, the temporary erosion and sediment ESCMs may be used as the permanent erosion and sediment ESCMs if they meet the following criteria:

1. The ESCM was installed correctly,
2. Is in a functional condition,
3. Has had all accumulated sediment removed.

**C. The Stormwater Pollution Prevention Plan (SWPPP)** is the document that identifies potential sources of sediment or other pollution from construction activity and ensures practices are used to reduce the contribution of pollutants from construction site runoff.

**D. Contractor Controlled Areas** are project areas not included in the contract, but are obtained and solely controlled by the Contractor (e.g., concrete or asphalt batch plants, concrete washout areas, equipment staging yards, material storage areas, excavated material disposal areas, Contractor furnished borrow areas, etc.).

**E. Maintenance** is any action taken to keep an ESCM in working condition. These actions may consist of repairing failures of the ESCM itself.

**F. Noncompliance** is any action or inaction that violates the regulations imposed by the applicable permits or the requirements of this special provision and other contract documents. Failure of an ESCM does not necessarily constitute noncompliance as long as the ESCM is repaired, replaced or supplemented within the timelines established in the applicable permits and no sediment is discharged from the site or into a water of the state.

## **2. CONSTRUCTION REQUIREMENTS**

Develop a SWPPP specific to the project. The creation of the SWPPP is a cooperative effort between the NDDOT who creates the project plan sheets and the Contractor who creates a complete SWPPP which incorporates the plan sheets and the Contractor's means and methods. The project plan sheets by themselves do not meet the requirements of a complete SWPPP and should not be considered as such. The Contractor has the flexibility to modify the design and implementation of the temporary erosion and sediment controls to match the Contractor's means and methods and/or field conditions. These changes must be documented in the SWPPP and meet all regulatory requirements.

Obtain appropriate permit coverage for the activities conducted in Contractor Controlled Areas. A permit will be required for these areas regardless of their size. The NDDOT will have no responsibility for these areas. Provide copies of the completed and signed Notice of Intent submitted for permit coverage to the Engineer before activities in these areas commence. Do not commence activities in these areas until after permit coverage has begun. Provide copies of Permit Coverage Letters for these areas to the Engineer within 7 days of receiving them from the regulating agency.

Install perimeter erosion and sediment ESCMs according to the plans/SWPPP prior to site disturbance.

Change the location of temporary erosion and sediment ESCMs to fit the field conditions.

Update the SWPPP as work progresses, or as directed by the Engineer. Update the SWPPP to show changes due to revisions in work schedules or sequence of construction. Update the site map to reflect erosion and sediment ESCMs that have been installed, changed, or removed.

Do not rely on perimeter ESCMs as the sole method of controlling erosion. As the project progresses, install temporary erosion and sediment ESCMs within the perimeter ESCMs to control erosion resulting from the construction of the project.

Use temporary erosion and sediment ESCMs to prevent contamination of adjacent streams or other watercourses, lakes, ponds or other areas of water impoundment.

Coordinate temporary erosion and sediment ESCMs with the construction of permanent erosion and sediment ESCMs to provide continuous erosion control. Do not install temporary erosion and sediment ESCMs when permanent erosion and sediment ESCMs are able to be installed. Once the permit is terminated or transferred to the Department, the maintenance of the permanent erosion and sediment ESCMs becomes the responsibility of the NDDOT.

Install stabilization ESCMs (mulch, seeding and mulch, etc.) in areas that have been disturbed where work has temporarily or permanently ceased following the timelines established in the applicable permits. If implementation of stabilization is precluded by snow cover, undertake such measures as soon as conditions allow.

Maintain the effectiveness of the temporary erosion and sediment ESCMs as long as required to contain sediment runoff. Inspect the temporary erosion and sediment ESCMs and complete the inspection and maintenance reports every 14 days and within 24 hours of a rainfall event of 0.25 inch or more. During prolonged rainfall (more than 1 day), conduct an inspection within 24 hours of the first day of the event and within 24 hours after the end of the event. Inspections are required only during normal business hours. Install a rain gauge to monitor rainfall amounts as required by the appropriate permit.

Correct any deficiencies in the ESCMs within the timelines established in the applicable permits. If conditions do not permit access to the ESCM, corrective actions can be taken by installing additional ESCMs. Correct the original deficiencies as soon as conditions allow access to their location without causing additional damage to the slopes. In the inspection logs, document the conditions that prohibit access.

Provide copies of all inspections, documentation, record keeping, maintenance, remedial actions, and repairs required by the applicable permits to the Engineer. Provide inspection and maintenance reports within 3 working days after an inspection has been conducted.

Provide, at the preconstruction conference, documentation of any Subcontractor hired for erosion control showing that the Subcontractor's on site supervisor is certified through the NDDOT Erosion & Sediment Control Construction Certification Training. This certification must be maintained by the Subcontractor's onsite supervisor through the term of the contract. The Engineer will provide a verification of their certification through the NDDOT Erosion & Sediment Control Construction Certification Training at the preconstruction conference and will maintain that certification through the term of the contract.

Provide immediate written notification to the Engineer of proposed changes to the erosion control plan or SWPPP. The Engineer will review the proposed changes and determine if they are adequate. Documentation of maintenance and inspections that does not affect the erosion control plan or SWPPP does not require approval by the Engineer.



Remove the temporary devices when directed by the Engineer or when permanent erosion and sediment controls are installed.

### **3. Erosion and Sediment Control Supervisor.**

**A. General.** Designate an erosion and sediment control supervisor. Provide the name and contact information for the supervisor at the preconstruction meeting. If this erosion and sediment control supervisor becomes unavailable on the project, designate a replacement supervisor. Notify the Engineer if this supervisor changes and provide the contact information for the new supervisor.

**B. Qualifications.** The supervisor shall be:

1. An employee of the Prime Contractor;
2. Familiar with installation, maintenance and removal of ESCMs and the requirements of the erosion and sediment control plans, applicable permit requirements, specifications, plans and this provision; and
3. Competent to supervise personnel in erosion and sediment control operations.
4. Certified through the NDDOT Erosion & Sediment Control Construction Certification Training and maintain that training throughout the term of the contract.

**C. Duties.** The supervisor shall:

1. Provide erosion and sediment control as required by the SWPPP, Plans, and Specifications.
2. Be on the site to supervise the installation, operation, inspection, maintenance, and removal of the erosion and sediment ESCMs.
3. Update the SWPPP as work progresses to show changes due to revisions in work schedules or sequence of construction, or as directed by the Engineer. Update the site map to reflect erosion and sediment ESCMs that have been installed, changed, or removed.
4. Propose changes to improve erosion and sediment control.
5. Be accessible to the job site within 24-hours.
6. Provide the Engineer with documentation of all erosion and sediment control activities and inspections as required above.

#### **4. PERFORMANCE**

Correct all areas of noncompliance within 24 hours after notification of noncompliance. If corrective actions are not taken within 24 hours, the Engineer may:

1. Assess a contract price reduction of \$500 per day per instance;
2. Have deficiencies corrected by another Contractor and deduct the cost of the work from the monies due or to become due to the Contractor;
3. Suspend all work; or
4. Withhold payment on other contract items/pay estimates.

These actions will be applied until deficiencies have been corrected.

#### **5. BASIS OF PAYMENT**

ESCM installation will be paid for at the contract unit price for erosion and sediment control for the appropriate items and sections. The plans will detail the required ESCMs for temporary and permanent installations. The same bid items may be used for temporary and permanent ESCMs.

ESCM items will be measured as specified in the "Method of Measurement" portion of the appropriate section of the specifications.

ESCM item removal will be paid for at the contract unit price for "Remove \_\_\_\_\_" in the appropriate section of the specifications.

Include the costs for labor, materials, maintenance, equipment, disposal, adherence to the permit, and SWPPP modifications in the respective pay items.

When the Engineer directs the replacement of temporary erosion and sediment ESCMs that are no longer functional because of deterioration or functional incapacity and those items were installed as specified in the Contract or as directed by the Engineer, the Department will pay for replacement ESCMs

No payment will be made for replacing temporary erosion and sediment ESCMs that the Engineer determines are ineffective because of improper installation, lack of maintenance, or the Contractor's failure to pursue timely installation of permanent erosion and sediment ESCMs as required in the Contract.

No payment will be made for replacing temporary erosion and sediment ESCMs due to contractor operations. Include the cost to move Flotation Silt Curtain as work progresses in the price bid for "Flotation Silt Curtain".

Erosion and sediment controls for Contractor Controlled Areas are the responsibility of the Contractor and will not be paid for by the Department.

Removal of sediment from silt fence and fiber rolls will be paid for at the price listed in the "Price Schedule PS-1."

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION**

**LOCAL AGENCY CONTRACTS**

References to NDDOT, Department, Director, or Engineer in the Standard Specifications for Road and Bridge Construction and other portions of the Contract must be construed as referring to the Owner of the project.

If the Contractor intends to file a claim for additional compensation for work or material not covered by the Contract, the Contractor is required to prosecute the claim in accordance with the Standard Specifications for Road and Bridge Construction, Section 104.05, "Claims for Adjustment". The provisions of Section 104.05 D, "Conditions Precedent to Contractor's Demand for Arbitration", are not applicable to this Contract, nor are the provisions of North Dakota Century Code §24-02-26 et seq. regarding arbitration applicable, as the North Dakota Department of Transportation is not a party to the Contract.

## **NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**

### **SPECIAL PROVISION**

### **LIMITATIONS OF OPERATIONS**

#### **DESCRIPTION**

Section 108.05, "Limitations of Operations" is no longer valid. Use this Special Provision in its place.

#### **108.05 LIMITATION OF OPERATIONS**

##### **A. General.**

Perform the work in a manner and sequence that minimizes interference to traffic, and with due regard to the location of detours and provisions for handling traffic. Do not begin work to the prejudice or detriment of work already started; the contract may require a section of roadway to be finished before starting additional sections if the opening of the section is essential to public convenience.

If the prosecution of the work is discontinued, provide the Engineer at least 24-hours notice before resuming operations.

##### **B. Holidays.**

Unless the contract allows work on holidays, perform work on holidays only with the Engineer's prior written approval. Submit a written request to the Engineer by noon 2 business days before the requested holiday.

##### **C. Night-time Operations and Extended Hours.**

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

When performing work in low light conditions, implement proper safety precautions and provide adequate lighting for the performance and inspection of the work.

###### **2. Nighttime Operations.**

Unless the contract allows for nighttime operations, perform work at night only with the Engineer's prior written approval.

Submit a written request to the Engineer a minimum of 7 calendar days before anticipated nighttime operations. The Engineer may deny the request or delay approval if it would require additional staffing considerations. If nighttime operations requires the Engineer to hire additional forces, nighttime operations may not be allowed for up to 30 days from the receipt of the request.

When requesting to perform nighttime operations, include a plan to ensure the safety of all individuals on the project site, including the Contractor's and subcontractor's workers, Department representatives, and the traveling public.

The Department bears no liability for costs or delays resulting from the Engineer's approval, rejection, or delay for staffing purposes of a request to perform nighttime operations.

**3. Extended Hours.**

Extended hours are allowed before sunrise with verbal notice given to the Engineer the previous day. Extended hours are allowed after sunset with verbal notice given to the Engineer that same day.

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION**

**BITUMEN TESTING PRICE ADJUSTMENTS**

**DESCRIPTION**

This Special Provision outlines the Contract Price Adjustment procedures for acceptance of PG Asphalt Binder Using the Multiple Stress Creep Recovery (MSCR) Test under AASHTO M 332.

**MATERIAL ACCEPTANCE SPECIFICATION**

**A. Sampling.**

Obtain one sample of asphalt binder for each 250 tons of binder material supplied to the project. Obtain the sample as prescribed in the NDDOT Field Sampling and Testing Manual, Procedure NDDOT 1. Each 250 tons of material will represent a subplot and 4 sublots will constitute a lot of material. Partial lots will consist of however many subplot samples were collected for that lot.

**B. Original and Check Samples.**

Each sample consists of two parts, an original and a check. The Engineer will perform tests using the original sample first.

If a test returns a value resulting in a pay factor of less than 1.00, the Engineer will perform that test on the check sample and the check sample results will be used to determine the pay factor for the material.

**C. Testing Parameters.**

The Engineer will randomly select one subplot for testing per lot.

If the check sample results in a pay factor of less than 1.00 the Engineer will perform the substandard tests on the remaining sublots within that lot.

**D. Determination of Pay Factor.**

The Engineer will apply the pay factors in the Basis of Payment section of this Special Provision to each individual subplot of material. If more than one test parameter in a subplot results in a pay factor of less than 1.00, the Engineer will apply the pay factor that results in the largest monetary deduction to that subplot.

**BASIS OF PAYMENT**

The pay factor determined by the Engineer will be applied to the "PG \_\_\_\_\_ Asphalt Cement" contract item. The pay factor will be multiplied by the unit cost of the item and the quantity of oil represented by the sample.

**Table 1**  
**Requirements on Original Binder**

Specification	Test Result	Pay Factor (Percent)
Dynamic Shear AASHTO T 315 $G^*/\sin \delta$ Min. 1.00 kPa	$\geq 1.00$	1.00
	0.97 – 0.99	0.95
	0.94 – 0.96	0.90
	0.91 – 0.93	0.85
	$< 0.91$	0.70

**Table 2**  
**Requirements on Rolling Thin Film Oven (RTFO) Residue**

Specification	Test Result	Pay Factor (Percent)	Specification	Test Result	Pay Factor (Percent)
Standard Traffic “S” AASHTO T 350 $J_{nr@3.2}$ Max. 4.5 kPa <sup>-1</sup>	$\leq 4.5$	1.00			
	4.6	0.95			
	4.7	0.90			
	4.8	0.85			
	$> 4.8$	0.70			
Heavy Traffic “H” AASHTO T 350 $J_{nr@3.2}$ Max. 2.0 kPa <sup>-1</sup>	$\leq 2.0$	1.00	Heavy Traffic “H” AASHTO R 92 Percent Recovery @ 3.2 kPa Min. 30%	$> 30$	1.00
	2.1	0.95		29	0.95
	2.2	0.90		28	0.90
	2.3	0.85		27	0.85
	$> 2.3$	0.70		$< 27$	0.70
Very Heavy Traffic “V” AASHTO T 350 $J_{nr@3.2}$ Max. 1.0 kPa <sup>-1</sup>	$\leq 1.0$	1.00	Very Heavy Traffic “V” AASHTO R 92 Percent Recovery @ 3.2 kPa Min. 55%	$> 55$	1.00
	1.1	0.95		54	0.95
	1.2	0.90		53	0.90
	1.3	0.85		52	0.85
	$> 1.3$	0.70		$< 52$	0.70
Extreme Traffic “E” AASHTO T 350 $J_{nr@3.2}$ Max. 0.5 kPa <sup>-1</sup>	$\leq 0.5$	1.00	Extreme Traffic “E” AASHTO R 92 Percent Recovery @ 3.2 kPa Min. 75%	$> 75$	1.00
	0.6	0.95		74	0.95
	0.7	0.90		73	0.90
	0.8	0.85		72	0.85
	$> 0.8$	0.70		$< 72$	0.70



**Table 3**  
**Requirements for Pressure Aging Vessel (PAV)**  
**Residue**

<b>Specification</b>	<b>Test Result</b>	<b>Pay Factor (Percent)</b>
Standard Traffic "S" AASHTO T 315 DSR, $G^*(\sin \delta)$ Max. 5000 kPa	$\leq 5000$	1.00
	5001 - 5200	0.95
	5201 - 5400	0.90
	5401 - 5600	0.85
	$> 5600$	0.70
Traffic "H", "V", "E" AASHTO T 315 DSR, $G^*(\sin \delta)$ Max. 6000 kPa	$\leq 6000$	1.00
	6001 - 6050	0.95
	6051 - 6100	0.90
	6101 - 6150	0.85
	$> 6150$	0.70
Creep Stiffness AASHTO T 313 Max. 300 mPa	$\leq 300$	1.00
	301 - 310	0.95
	311 - 320	0.90
	321 - 330	0.85
	$> 330$	0.70
m-value AASHTO T 313 Min. 0.300	$\geq 0.300$	1.00
	0.295 – 0.299	0.95
	0.290 – 0.294	0.90
	0.285 – 0.289	0.85
	$< 0.285$	0.70

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION**

**FEDERAL PROHIBITION ON CERTAIN TECHNOLOGICAL HARDWARE**

**DESCRIPTION**

This Special Provision details technological items that are prohibited from use on Department contracts. The contents of this SP take precedent over requirements regarding affected equipment in all other contract documents.

**CONTRACT REQUIREMENTS**

**A. Technological Equipment Prohibitions.**

Equipment, services, and systems using telecommunications equipment or services are prohibited from containing equipment produced by:

- Huawei Technologies Company;
- ZTE Corporation; and
- Any subsidiary or affiliate of the named entities.

Video surveillance and telecommunications equipment are prohibited from containing equipment produced by:

- Hytera Communications Corporation;
- Hangzhou Hikvision Digital Technology Company;
- Dahua Technology Company; and
- Any subsidiary or affiliate of the named entities.

**B. Contractor Certification.**

The Prime Contractor must complete the information below, sign this Special Provision, and submit the signed document to the Engineer at the preconstruction conference. This signature affirms that no prohibited products will be used in the project.

Project Number(s): \_\_\_\_\_

PCN(s): \_\_\_\_\_

Company Name: \_\_\_\_\_

Signatory Name (printed): \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## **NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**

### **SPECIAL PROVISION**

#### **HMA CORING, ACCEPTANCE, AND PAY FACTORS**

##### **DESCRIPTION**

This special provision modifies portions of Section 430 of the 2020 Standard Specifications for Road and Bridge Construction. It changes the requirements of shoulder construction, depending on the method of construction; updates coring requirements for the changes in subplot size; and to clarify how contract price adjustments are calculated.

##### **CONSTRUCTION REQUIREMENTS**

Replace Section 430.04 I, "Compaction" and Section 430.04 M, "Acceptance" with the following text.

##### **I. Compaction.**

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

Remove all surface irregularities before beginning compaction.

Sequence rolling operations and select the type and the number of rollers to match production and to attain the required density before the mat temperatures fall below 185°F.

In areas not accessible to rollers, compact the pavement mat with hand or mechanical tampers.

###### **2. Calculated Density.**

###### **a. General.**

Use calculated density on mainline pavement, interstate crossroads, ramps, turn lanes, monolithically placed shoulders, rest area approaches, and parking lots.

###### **b. Coring.**

###### **(1) General.**

Obtain pavement cores at locations designated by the Engineer under the observation of the Engineer.

Use a machine that cuts a cylindrical core sample without disturbing the density of the sample. Complete coring on or before the working day following the placement of the lift. Obtain a core with a smooth outer surface, no distortion of the cylindrical shape, and no displacement of the aggregate particles. Obtain a core that is 4 to 6 inches in diameter and the full depth of the in place asphalt.

Fill core holes before placing the subsequent lift of pavement. If there is no subsequent lift of pavement, fill the core hole within 24 hours of obtaining the core. Remove free standing water before filling core holes. Fill core holes in 2

inch lifts using material from the same mix design used on the roadway. Compact each lift using a hand tamper.

**(2) Pavement Density Cores.**

Use a masonry saw to cut the core so that only the layer to be tested is removed.

Label each core, using a system approved by the Engineer, to identify the location from which the core was obtained.

**(3) Pavement Thickness Determination Cores.**

Obtain pavement thickness determination cores after the final lift of pavement has been placed. Label the cores. The Engineer will take possession of these cores immediately upon extraction. Do not cut these cores.

**3. Ordinary Compaction.**

**a. General.**

Use ordinary compaction on non-monolithic shoulders, driveways, section line approaches, bike paths, leveling courses, and patches.

Ordinary compaction consists of breakdown rolling, intermediate rolling, and finish rolling. Compact the bituminous material until the surface is tightly bound and shows no displacement under operation of the roller.

For patching, immediately after spreading perform initial rolling with pneumatic-tired rollers or combination rollers.

**b. Breakdown Rolling.**

Breakdown rolling consists of one or more complete coverage with a roller meeting the requirements of one of the following Sections:

- 151.01 A.3, “Self-Propelled Pneumatic-Tired Rollers”;
- 151.01 B.2, “Smooth-Faced Steel-Wheel Roller: Tandem – Type A”;
- 151.01 C, “Vibratory Rollers”; or
- 151.01 D, “Combination Rollers”.

**c. Intermediate Rolling.**

Follow breakdown rolling with intermediate rolling with a roller conforming to Section 151.01 A.3, “Self-Propelled Pneumatic-Tired Rollers”, or 151.01 D, “Combination Rollers” until the surface is tightly bound and shows no displacement under the roller.

If roller tires pick up the bituminous material or there are excessive roller marks in the mat, the Engineer may allow the removal of the intermediate rolling operation if it appears to the Engineer that compaction is being achieved.

**d. Finish Rolling.**

Perform the finish rolling with a roller conforming to Section 151.01 B.3, “Smooth-Faced Steel-Wheel Roller: Tandem – Type B”, or 151.01 C, “Vibratory Rollers” in the static mode, and continue until roller marks are eliminated.

## **M. Acceptance.**

### **1. General.**

The Engineer will accept bituminous mix based on the criteria in this section.

The Engineer will include material used in shoulder placement when the shoulder is placed monolithically with the adjacent lane. Field density cores may be obtained in this area.

### **2. Aggregate.**

The Engineer will accept aggregate used in the mix based on QC tests that are verified by QA testing, and the control limits specified in Section 430.04 E.5, "Control Limits".

If the results for two consecutive aggregate gradation tests in a single day fall outside the single test target value control limits, the Engineer will apply a contract price adjustment as specified in Section 430.06 C, "Contract Price Adjustments".

### **3. Asphalt Content.**

The Engineer will base the acceptance of the asphalt content of bituminous mix on the totalizer readings obtained as specified in Section 430.04 E, "QC Testing" and SFN 9988, "Mix Bitumen Cut-Off Report" and will apply a contract price adjustment as specified in Section 430.06 C, "Contract Price Adjustments".

If the average asphalt content, as determined by the Engineer according to SFN 9988, "Mix Bitumen Cut-off Report" deviates from the target value by 0.40 percentage points or more, the Engineer may reject the material. If the material is accepted, the Engineer will apply a contract price adjustment as specified in Section 430.06 C, "Contract Price Adjustments".

### **4. Field Density.**

This section will apply when the pavement is constructed as specified in Section 430.04 I.2, "Calculated Density".

The Engineer will base acceptance of the density of hot mix asphalt on the average density of the pavement compared to the daily average maximum theoretical density. The comparison will be made using SFN 59132, "Density Pay Factor".

The Engineer will determine the density of pavement based on lots. A lot is equal to the amount of material, in tons, placed each production day.

A subplot is defined as a single lift, one paver width wide, and 1,000 feet long. If a partial subplot is less than 500 feet, it will be included in the previous subplot. A partial subplot greater than 500 feet will be considered a separate lot.

The individual subplot densities will be averaged to determine the density of the pavement lot.

If the average density of the pavement compared to the daily average maximum theoretical density is above the values in Table 430-10, the Engineer will apply the adjustment factors specified in Section 430.06 C, "Contract Price Adjustments".

If the average density of the pavement compared to the daily average maximum theoretical density is at or below the values specified in Table 430-10, remove and replace the pavement.

**Table 430-10**

<b>Superpave FAA 40, 41, 42, and 43</b>	<b>Superpave FAA 44 and 45</b>
88.0%	89.0% <sup>1</sup>

<sup>1</sup> When the lift of pavement is placed on aggregate base, reclaimed material, or cold in place recycle material this number is reduced to 88.0%

## **BASIS OF PAYMENT**

Replace Section 430.04 C.1, "General" with the following text.

### **C. Contract Price Adjustments.**

#### **1. General**

The Engineer will calculate the Combined Adjustment Factor by multiplying the individual adjustment factors for:

- Aggregate gradation;
- Asphalt content; and
- Compaction.

1.0 will be subtracted from the Combined Adjustment Factor to determine the Contract Price Adjustment.

The contract price adjustment will be determined by multiplying the Contract Price Adjustment Factor by the total tons of hot mix asphalt placed during a single day and the contract unit price for "Superpave, FAA \_\_\_\_" or "RAP Superpave FAA \_\_\_\_".

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION**

**CITY OF WEST FARGO STANDARD SPECIFICATIONS**

**Project: UGP-8-992(041); PCN 22277**

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of North Dakota.

City of West Fargo Standard Specifications	Kevin J. Knott Moore Engineering, Inc.	<i>This document was originally issued and sealed by Kevin J. Knott, Registration Number PE-5679, on 08/28/2020 and the original document is stored at the City of West Fargo</i>
--	---	---

**1. SUMMARY**

- A. The City of West Fargo has Standard Specifications to cover the domestic water distribution and sanitary sewage collection portions of the project.

**2. GENERAL**

- A. All related requirements in these portions of the City of West Fargo specifications not included in this special provision will default to the NDDOT Standard Specifications for Road and Bridge Construction. This includes references to legal requirements, quality assurance, product delivery, storage, and handling, submittals, substitutions, and other references omitted from the City of West Fargo Standard Specifications.

- B. Payment and measurement for water distribution and sanitary sewage collection items shall be in accordance with the City of West Fargo Standard Specifications for the following items:

SPEC	CODE	NDDOT PAY ITEM	CITY OF WEST FARGO SPECIFICATION
724	0210	FITTINGS-DUCTILE IRON	331413 - Public Water Utility Distribution Piping
724	0290	GATE VALVE & BOX 4IN	331419 - Valves & Hydrants for Water Utility Service
724	0300	GATE VALVE & BOX 6IN	331419 - Valves & Hydrants for Water Utility Service
724	0310	GATE VALVE & BOX 8IN	331419 - Valves & Hydrants for Water Utility Service
724	0411	6IN HYDRANT	331419 - Valves & Hydrants for Water Utility Service
724	0611	WATER SERVICE LINE 1IN	331417 - Site Water Service Utility Laterals
724	0621	WATER SERVICE LINE 2IN	331417 - Site Water Service Utility Laterals
724	0636	WATE SERVICE LINE 6IN	331417 - Site Water Service Utility Laterals
724	0790	WATERMAIN 4IN	331417 - Site Water Service Utility Laterals
724	0810	WATERMAIN 6IN PVC	331413 - Public Water Utility Distribution Piping
724	0830	WATERMAIN 8IN PVC	331413 - Public Water Utility Distribution Piping
724	0852	WATERMAIN 16IN PVC	331413 - Public Water Utility Distribution Piping
724	0955	WATER SERVICE CONNECTION 1IN	331417 - Site Water Service Utility Laterals
724	0960	WATER SERVICE CONNECTION 2IN	331417 - Site Water Service Utility Laterals
724	0970	WATER LINE CONNECTION 4IN	331417 - Site Water Service Utility Laterals
724	0975	WATER LINE CONNECTION 6IN	331417 - Site Water Service Utility Laterals
724	1110	8IN SANITARY SEWER PIPE	333111 – Public Sanitary Sewerage Gravity Piping

- C. Pay item names comply with standard NDDOT naming conventions as listed above.



### 3. TABLE OF CONTENTS

#### DIVISION 02 – EXISTING CONDITIONS

028213.33 Asbestos Abatement for Utilities

#### DIVISION 31 – EARTHWORK

310513 Soils for Earthwork

310516 Aggregates for Earthwork

312316.13 Trenching

#### DIVISION 33 – UTILITIES

330110.58 Disinfection of Water Utility Piping Systems

330130.11 Television Inspection of Sewers

330505.31 Hydrostatic Testing of Sewers

330505.41 Air Testing

330505.43 Mandrel Testing

330509.33 Thrust Restraint for Utility Piping

330597 Identification & Signage for Utilities

331413 Public Water Utility Distribution Piping

331417 Site Water Service Utility Laterals

331419 Valves & Hydrants for Water Utility Service

333111 Public Sanitary Sewerage Gravity Piping

## **02 - EXISTING CONDITIONS**

## SECTION 028213.33 - ASBESTOS ABATEMENT FOR UTILITIES

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Removal of ACM-contaminated pipeline and pipeline coatings.
2. Cutting of pipelines containing or coated with ACM.
3. Monitoring of Work area during cutting and cleaning operations.

##### B. Related Requirements:

1. Section 331113 - Public Water Utility Distribution Piping: Coordination of pipe, valves, and appurtenances during removal operations.

#### 1.2 DEFINITIONS

##### A. ACM: Asbestos-containing material.

#### 1.3 REFERENCE STANDARDS

##### A. Occupational Safety and Health Administration (OSHA):

1. 29 CFR Part 1926 - Safety and Health Regulations for Construction.
2. 40 CFR Part 763, Subpart E, Appendix E, Section 1- Polarized Light Microscopy.
3. 42 CFR Part 84, Subpart K - Non-Powered Air-Purifying Particulate Respirators.

##### B. U.S. Environmental Protection Agency:

1. National Emission Standards for Hazardous Air Pollutants (NESHAPs).

##### C. North Dakota Department of Health:

1. Interoffice Memo Dated August 13, 2018: Removal or Abandonment In-Place of Asbestos Cement Pipe.
2. North Dakota Administrative Code (NDAC) 33-15-13-02.
3. Emission Standards for Asbestos NDAC 33-20 Solid Waste Management Rules.

#### 1.4 QUALITY ASSURANCE

##### A. Perform Work according to NESHAPs, OSHA, and North Dakota Department of Health standards.

## 1.5 QUALIFICATIONS

- A. Contractor: Company specializing in repairing, modifying, cleaning, or removing AC pipe or ACM-coated pipe as specified in this Section with minimum three years' documented experience.
- B. On-Site Representative: Person trained in performing Work of this Section with minimum three years' documented experience. Supervisor and/or Inspector: Certified by the State of North Dakota.
- C. Disposal Firm: Company specializing in packaging and hauling ACM to disposal site.
- D. Active Waste Disposal Site: Solid waste disposal site permitted to accept ACM waste.
- E. Testing Laboratory: Company participating in National Voluntary Laboratory Accreditation Program for asbestos, administered by National Institutes of Standards and Technology.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Store materials according to manufacturer instructions.
- D. Respirators Not in Use:
  - 1. Store in sanitary location that protects respirators from dust, sunlight, heat, extreme cold, excessive moisture, and potentially damaging chemicals.
  - 2. Place in plastic bags or closed containers.

## PART 2 - PRODUCTS

### 2.1 RESPIRATORS

- A. Manufacturers:
  - 1. Furnish materials according to NESHAPs, OSHA, and North Dakota Department of Health standards.
- B. Description:
  - 1. Comply with 42 CFR Part 84, Subpart K.
  - 2. Type: Half-face mask; reusable after washing.
  - 3. Maintenance: Replaceable filters and cartridges only.
  - 4. Single-use respirators are not acceptable.

- C. Filters: Top air inlet.
- D. Performance and Design Criteria:
  - 1. Application: Asbestos abatement for concentrations up to 10 times permissible exposure limit (PEL).
  - 2. Design: Low profile.

## 2.2 AIR MONITOR

- A. Manufacturers:
  - 1. Furnish materials according to NESHAPs, OSHA, and North Dakota Department of Health standards.
- B. Description:
  - 1. Type: Laser.
  - 2. Power Source: Batteries.
  - 3. Screen: LCD.
  - 4. Output: Greater than 0.5 micron and 2.5 micron particulates.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for application preparation.
- B. Provide notification to the North Dakota Division of Air Quality – Asbestos Program by completing and submitting a Notification of Demolition and Renovation form at least 10 working days prior to removing, cutting, or damaging ACM Piping.
- C. Consult with a North Dakota – certified asbestos inspector to determine if asbestos cement pipe (ACP) is friable or non-friable.
- D. Retain a North Dakota – certified asbestos supervisor, on-site during work activities, whenever mechanical tools are used for cutting or removal or the material has been classified as friable.
- E. Perform ACM removal without damage to or contamination of adjacent Work or existing area.
- F. Perform cleaning operations without taking pipeline out of service.

### 3.2 APPLICATION

- A. Removal of Pipe:
  - 1. Cutting and Disposal:

- a. Utilize appropriate cutting methods. Crushing or bursting shall not be permitted.
- b. Keep the material wet during all times of pipe cutting/removal to minimize asbestos fiber release. Remove and dispose of all wet soil appropriately.
- c. Transport removed piping to a restricted, central, staging area to cut for transport or disposal.
- d. Deposit bagged pipeline pieces in leak-proof metal collection box secured with tarpaulin covers. Use appropriate warning labels.
- e. Transport filled boxes to an approved landfill. Recycling is prohibited.
- f. A licensed and certified asbestos supervisor will accompany transport vehicles to manage transport process.
- g. Maintain supply of fresh water near cutting operation to keep freshly cut areas of ACM damp while cutting piping.
- h. Individually wrap each joint of piping and pipe ends prior to loading.
- i. Maintain waste manifest records. Send copies of all records to the North Dakota Division of Air Quality within 30 days of disposal.

### 3.3 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Requirements for inspecting and testing.
- B. Sample Testing:
  1. Test pipe or pipe coating for asbestos prior to repairing, modifying, or removing pipelines.
  2. Remove samples of pipe or coating along entire length of piping to be removed and have testing laboratory determine quantity of asbestos that may be present.

END OF SECTION 028213.33

## **31 - EARTHWORK**

## SECTION 310513 - SOILS FOR EARTHWORK

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Subsoil materials.
2. Topsoil materials.

##### B. Related Requirements:

1. Section 310516 - Aggregates for Earthwork: Coarse and fine aggregate materials.
2. Section 312316.13 - Trenching: Excavating as required for utilities.
3. Section 329300 - Plants: Preparation of subsoil and topsoil, topsoil bedding, trees, plants, ground cover, mulch, fertilizer, pruning, and maintenance.

#### 1.2 REFERENCE STANDARDS

##### A. ASTM International:

1. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup>).
2. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).
3. ASTM D6938 - Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

#### 1.3 SUBMITTALS

- A. Section 013300 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit name of imported materials source.
- C. Samples: Submit, in airtight containers, 35-lb. sample of each type of fill to testing laboratory.

#### 1.4 QUALITY ASSURANCE

- A. Furnish each subsoil and topsoil material from single source throughout Work.



## PART 2 - PRODUCTS

### 2.1 MATERIALS

#### A. Subsoil:

1. Type S2:
  - a. Excavated and reused material.
  - b. Graded.
  - c. Free of lumps larger than 3 inches, rocks larger than 6 inches, frost, and debris.
  - d. Organic content of less than 3 percent for material placed below structures.
  - e. Organic content of less than 5 percent for materials placed within 3 vertical feet of the top of finished pavement subgrades.

#### B. Topsoil:

1. Type S4:
  - a. Excavated and reused material.
  - b. Graded.
  - c. Free of roots, rocks larger than 1 inch, subsoil, debris, large weeds, and foreign matter.
2. Type S5:
  - a. Imported borrow.
  - b. Friable loam.
  - c. Reasonably free of roots, rocks larger than 1 inch, subsoil, debris, large weeds, and foreign matter.

### 2.2 SOURCE QUALITY CONTROL

#### A. Section 014000 - Quality Requirements: Requirements for testing, inspection, and analysis.

#### B. Testing and Analysis:

1. Subsoil Material: Comply with ASTM D698 and ASTM D6938.
2. If tests indicate materials do not meet specified requirements, replace material or modify in place and retest.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

#### A. Excavation:

1. Excavate subsoil and topsoil from designated areas.
2. Strip topsoil to full depth of topsoil in designated areas.
3. Remove excess excavated materials, subsoil, and topsoil not intended for reuse from Site.
4. Remove excavated materials not meeting requirements for subsoil and topsoil materials from Site.

B. Stockpiling:

1. Stockpile excavated material meeting requirements for subsoil and topsoil materials.
2. Stockpile materials on Site at locations as designated by Engineer.
3. Stockpile in sufficient quantities to meet Project schedule and requirements.
4. Separate differing materials with dividers or stockpile apart to prevent intermixing of soil types or contamination.
5. Direct surface water away from stockpile to prevent erosion or deterioration of materials.
6. Stockpile hazardous materials on impervious material and cover to prevent erosion and leaching until they are disposed.

3.2 CLEANING

A. Section 017000 - Execution and Closeout Requirements: Requirements for cleaning.

B. Stockpile:

1. Remove stockpile and leave area in clean and neat condition.
2. Grade Site surface to prevent freestanding surface water.
3. If directed by Engineer, leave unused materials in neat, compact stockpile with slopes not to exceed 4:1.

END OF SECTION 310513

## SECTION 310516 - AGGREGATES FOR EARTHWORK

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Coarse-aggregate materials.
2. Fine-aggregate materials.

##### B. Related Requirements:

1. Section 310513 - Soils for Earthwork: Fill and grading materials.
2. Section 312316.13 - Trenching: Excavating as required for utilities.
3. Section 331413 – Public Utility Distribution Piping: Pipe materials and fittings.
4. Section 331417 - Site Water Service Utility Laterals: Pipe materials and fittings.
5. Section 333111 – Public Sanitary Sewerage Gravity Piping: Pipe materials and accessories normally encountered with gravity sanitary piping.

#### 1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

##### A. Section 012000 - Price and Payment Procedures: Contract Sum/Price modification procedures.

##### B. Aggregate:

1. Basis of Measurement: By cubic foot yard, except when aggregate is included in other bid items.
2. Basis of Payment: Includes supplying aggregate materials, placing, and compacting.

#### 1.3 REFERENCE STANDARDS

##### A. American Association of State Highway and Transportation Officials:

1. AASHTO M 147 - Standard Specification for Materials for Aggregate and Soil-Aggregate Subbase, Base, and Surface Courses.

##### B. ASTM International:

1. ASTM C136/C136M - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
2. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup>).
3. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).
4. ASTM D4318 - Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

5. ASTM D6938 - Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

#### 1.4 SUBMITTALS

- A. Section 013300 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit name of imported materials source.
- C. Samples: Submit, in airtight containers, 35-lb. sample of each type of Type of aggregate to testing laboratory.

#### 1.5 QUALITY ASSURANCE

- A. Furnish each aggregate materials from single source throughout Work.
- B. Perform Work according to North Dakota Department of Transportation standards.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

##### A. Coarse Aggregate:

1. Type A1 (base): Conforming to North Dakota Department of Transportation Class 5, see Table 816-01 of the Standard Specifications for Road and Bridge Construction with the following revisions:

<u>Sieve Size</u>	<u>Percent Passing</u>
No. 200	6-10

2. Type A2 (recycled base): Conforming to North Dakota Department of Transportation Salvaged Base Course, see Section 817 of the Standard Specifications for Road and Bridge Construction.
3. Type A3 (surface): Conforming to North Dakota Department of Transportation Class 13, see Table 816-01 of the Standard Specifications for Road and Bridge Construction.
4. Type A4 (drainage): Conforming to North Dakota Department of Transportation Class 7, see Table 816-01 of the Standard Specifications for Road and Bridge Construction.
5. Coarse Aggregate Type A5 (pipe bedding and cover): Conforming to North Dakota Department of Transportation Class 3, see Table 816-01 of the Standard Specifications for Road and Bridge Construction.
6. Coarse Aggregate Type A6 (crushed): Washed, crushed rock with nominal size of 1.25 inches.

##### B. Fine Aggregate:

1. Type A7 (Sand): Natural river or bank sand; washed; free of silt, clay, loam, friable or soluble materials, and organic matter; graded according to ASTM D2487 Group Symbol SW; within the following limits:

- a. Percent Passing per Sieve Size:
  - 1) No. 4 100.
  - 2) No. 14 10 to 100.
  - 3) No. 50 5 to 90.
  - 4) No. 100 4 to 30.
  - 5) No. 200 Zero.

## 2.2 SOURCE QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Requirements for testing, inspection, and analysis.
- B. Testing and Analysis:
  - 1. Aggregate Material: Comply with AASHTO M 147.
  - 2. If tests indicate materials do not meet specified requirements, change material and retest.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Stockpiling:
  - 1. Stockpile materials on Site at locations as designated by Engineer.
  - 2. Stockpile in sufficient quantities to meet Project schedule and requirements.
  - 3. Separate different aggregate materials with dividers or stockpile apart to prevent intermixing of aggregate types or contamination.
  - 4. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

### 3.2 CLEANING

- A. Section 017000 - Execution and Closeout Requirements: Requirements for cleaning.
- B. Stockpile:
  - 1. Remove stockpile and leave area in clean and neat condition.
  - 2. Grade Site surface to prevent freestanding surface water.

END OF SECTION 310516

## SECTION 312316.13 - TRENCHING

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Excavating trenches for utilities.
2. Compacted fill from top of utility bedding to subgrade elevations.
3. Backfilling and compaction.

##### B. Related Sections:

1. Section 310513 - Soils for Earthwork: Soils for fill.
2. Section 310516 - Aggregates for Earthwork: Aggregates for fill.
3. Section 331413 - Public Water Utility Distribution Piping: Water piping and bedding.
4. Section 331417 - Site Water Service Utility Laterals: Pipe materials and fittings.
5. Section 333111 – Public Sanitary Sewerage Gravity Piping: Pipe materials and accessories normally encountered with gravity sanitary piping.

#### 1.2 REFERENCES

##### A. ASTM International:

1. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>).
2. ASTM D6938 - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

#### 1.3 DEFINITIONS

- ##### A. Utility: Any buried pipe, duct, conduit, or cable.

#### 1.4 QUALIFICATIONS

- ##### A. Prepare excavation under the direction of a Competent Person in accordance with OSHA standards and comply with requirements of OSHA 29 CFR, Part 1926, Subpart P, requirements for excavation and trenching operations.
- ##### B. OSHA requires a Registered Professional Engineer to evaluate slopes or excavations over 20 feet in depth.

#### 1.5 COORDINATION

- ##### A. Section 013000 - Administrative Requirements: Coordination and project conditions.

- B. Verify Work associated with lower elevation utilities is complete before placing higher elevation utilities.

## PART 2 - PRODUCTS - Not Used

### 2.1 FILL MATERIALS

- A. Subsoil Fill: Type S2 as specified in Section 310513 - Soils for Earthwork.
- B. Structural Fill: Type A1 as specified in Section 310516 - Aggregates for Earthwork.
- C. Granular Fill: Type A5 as specified in Section 310516 – Aggregates for Earthwork.

## PART 3 - EXECUTION

### 3.1 LINES AND GRADES

- A. Lay pipes to lines and grades indicated on Drawings.
  - 1. Engineer reserves right to make changes in lines, grades, and depths of utilities when changes are required for Project conditions.
- B. Use laser-beam instrument with qualified operator to establish lines and grades.

### 3.2 PREPARATION

- A. Call Local Utility Line Information service North Dakota One Call at 800-795-0555 or 811 within the statutory timelines before performing Work.
  - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Identify required lines, levels, contours, and datum locations.
- C. Protect plant life, lawns, rock outcropping and other features remaining as portion of final landscaping.
- D. Protect bench marks, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- E. Maintain and protect above and below grade utilities indicated to remain.
- F. Establish temporary traffic control and detours when trenching is performed in public right-of-way. Relocate controls and reroute traffic as required during progress of Work.

### 3.3 TRENCHING

- A. Excavate subsoil required for utilities.
- B. Remove lumped subsoil, boulders, and rock up to 1/6 cubic yard, measured by volume.
- C. Perform excavation within 24 inches of existing utility service in accordance with utility's requirements.
- D. Do not advance open trench more than 100 feet ahead of installed pipe.
- E. Cut trenches sufficiently wide to enable installation, meet requirements of compaction equipment, and allow inspection. Remove water or materials that interfere with Work.
- F. Excavate bottom of trenches maximum 24 inches wider than outside diameter of pipe.
- G. Excavate trenches to depth indicated on Drawings. Provide uniform and continuous bearing and support for bedding material and pipe.
- H. Do not interfere with 45 degree bearing splay of foundations or structures.
- I. When Project conditions permit, slope side walls of excavation starting 2 feet above top of pipe. When side walls cannot be sloped, provide sheeting and shoring to protect excavation as specified in this section.
- J. When subsurface materials at bottom of trench are loose or soft, excavate to greater depth as directed by Engineer until suitable material is encountered.
- K. Cut out soft areas of subgrade not capable of compaction in place. Backfill with Fill Type S2 and compact to density equal to or greater than requirements for subsequent backfill material.
- L. Trim excavation. Hand trim for bell and spigot pipe joints. Remove loose matter.
- M. Correct over excavated areas with compacted backfill as specified for authorized excavation or replace with fill concrete as directed by Engineer.
- N. Remove excess subsoil not intended for reuse, from site.
  - 1. If directed by Engineer, stockpile excess subsoil in area designated on site in accordance with Section 310513.

### 3.4 SHEETING AND SHORING

- A. Sheet, shore, and brace excavations to prevent danger to persons, structures and adjacent properties and to prevent caving, erosion, and loss of surrounding subsoil.
- B. Support trenches more than 5 feet deep excavated through unstable, loose, or soft material. Provide sheeting, shoring, bracing, or other protection to maintain stability of excavation.
- C. Design sheeting and shoring to be removed at completion of excavation work.



- D. Repair damage caused by failure of the sheeting, shoring, or bracing and for settlement of filled excavations or adjacent soil.
- E. Repair damage to new and existing Work from settlement, water or earth pressure or other causes resulting from inadequate sheeting, shoring, or bracing.

### 3.5 BACKFILLING

- A. Backfill trenches to contours and elevations with unfrozen fill materials.
- B. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen, or spongy subgrade surfaces.
- C. Place material in continuous layers as follows:
  - 1. Subsoil Fill: Maximum 12 inches loose depth.
  - 2. Structural Fill: Maximum 6 inches compacted depth.
  - 3. Granular Fill: Maximum 6 inches compacted depth.
- D. Employ placement method that does not disturb or damage utilities in trench, and surrounding structures.
- E. Maintain moisture content of fill materials to attain required relative compaction.
- F. Do not leave more than 50 feet of trench open at end of working day, unless determined by the Engineer that site conditions are unsatisfactory.
- G. Protect open trench to prevent danger to Owner and the public.

### 3.6 TOLERANCES

- A. Section 014000 - Quality Requirements: Tolerances.
- B. Top Surface of Backfilling Under Paved Areas: Plus or minus 0.04 feet from required elevations.
- C. Top Surface of General Backfilling: Plus or minus 0.08 feet from required elevations.

### 3.7 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements and 017000 - Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Perform laboratory material tests in accordance with ASTM D698.
- C. Perform in place compaction tests in accordance with the following:
  - 1. Density and Moisture Tests: ASTM D6938

- D. When tests indicate Work does not meet specified requirements, remove Work, replace, compact, and retest.
- E. Frequency of Tests:
  - 1. One test along Utility trenches at maximum 500 foot intervals per 2 feet of vertical lift.
  - 2. Two tests per structure (manhole) at  $\frac{1}{3}$  and  $\frac{2}{3}$  depth.
  - 3. One test per service trench.

### 3.8 PROTECTION OF FINISHED WORK

- A. Section 017000 - Execution and Closeout Requirements: Protecting finished work.
- B. Reshape and re-compact fills subjected to vehicular traffic during construction.

### 3.9 SCHEDULE

- A. Water and Sanitary Piping:
  - 1. Cover pipe and bedding with Fill Type S2: To subgrade elevation.
  - 2. Compact uniformly to minimum 95 percent of Standard Proctor (ASTM 698) maximum dry density. Moisture shall be not less than 1 percentage point below, nor more than 5 percentage points above optimum moisture content.

END OF SECTION 312316.13

## **33 - UTILITIES**

## SECTION 330110.58 - DISINFECTION OF WATER UTILITY PIPING SYSTEMS

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Disinfection of potable water distribution system.
2. Testing and reporting of results.

##### B. Related Requirements:

1. Section 331413 - Public Water Utility Distribution Piping: Product and execution requirements for installation and testing of site domestic water distribution piping.
2. Section 331417 - Site Water Service Utility Laterals: Pipe materials and fittings.

#### 1.2 REFERENCE STANDARDS

##### A. American Water Works Association:

1. AWWA B300 - Hypochlorites.
2. AWWA B302 - Ammonium Sulfate.
3. AWWA B303 - Sodium Chlorite.
4. AWWA C651 - Disinfecting Water Mains.

#### 1.3 SUBMITTALS

##### A. Section 013300 - Submittal Procedures: Requirements for submittals.

##### B. Disinfection Procedure:

1. Submit description of procedure, including type of disinfectant and calculations indicating quantities of disinfectants required to produce specified chlorine concentration.

##### C. Product Data: Submit manufacturer information for proposed chemicals and treatment doses.

##### D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

##### E. Certify that final water complies with disinfectant quality standards of the North Dakota Department of Health.

##### F. Test and Evaluation Reports: Indicate testing results comparative to specified requirements.

##### G. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.

##### H. Qualifications Statements:

1. Submit qualifications for manufacturer and applicator.

#### 1.4 CLOSEOUT SUBMITTALS

- A. Section 017000 - Execution and Closeout Requirements: Requirements for submittals.
- B. Disinfection Report:
  - 1. Type and form of disinfectant used.
  - 2. Date and time of disinfectant injection start and completion.
  - 3. Test locations.
  - 4. Name of person collecting samples.
  - 5. Initial and 24-hour disinfectant residuals in treated water in ppm for each outlet tested.
  - 6. Date and time of flushing start and completion.
  - 7. Disinfectant residual after flushing in ppm for each outlet tested.
- C. Bacteriological Report:
  - 1. Date issued, project name, and testing laboratory name, address, and telephone number.
  - 2. Time and date of water sample collection.
  - 3. Name of person collecting samples.
  - 4. Test locations.
  - 5. Initial and 24-hour disinfectant residuals in ppm for each outlet tested.
  - 6. Coliform bacteria test results for each outlet tested.
  - 7. Submit bacteriologist's signature and authority associated with testing.

#### 1.5 QUALITY ASSURANCE

- A. Perform Work according to AWWA C651.
- B. Perform Work according to North Dakota Department of Health standards.
- C. Testing Laboratory  
Fargo Cass Public Health  
435 14<sup>th</sup> Avenue S  
Fargo, ND 58103  
701-298-6986

#### 1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three years' documented experience.

### PART 2 - PRODUCTS

#### 2.1 DISINFECTION CHEMICALS

- A. All products that may come into contact with water intended for use in a public water system shall meet American National Standards Institute (ANSI)/National Sanitation Foundation International

(NSF) Standards 60 and 61. A product will be considered as meeting these standards if so certified by NSF, the Underwriters Laboratories, or other organization accredited by ANSI to test and certify such products.

B. Chemicals:

1. Hypochlorite: Comply with AWWA B300.
2. Ammonium Sulfate: Comply with AWWA B302.
3. Sodium Chlorite: Comply with AWWA B303.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation examination.
- B. Verify that piping system has been cleaned, inspected, and pressure tested.
- C. Perform scheduling and disinfecting activity with startup, water pressure testing, adjusting and balancing, and demonstration procedures, including coordination with related systems.

### 3.2 INSTALLATION

- A. Provide required equipment to perform Work of this Section.
- B. Introduce treatment into piping system.
- C. Maintain disinfectant in system for 24 hours.
- D. Flush, circulate, and clean until required disinfectant quality standard has been achieved using municipal domestic water.
- E. Replace permanent system devices that were removed for disinfection.

### 3.3 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Requirements for inspecting and testing.
- B. Disinfection, Flushing, and Sampling:
  1. Disinfect pipeline installation according to AWWA C651.
  2. Use of liquid chlorine is not permitted.
  3. Upon completion of retention period required for disinfection, flush pipeline until chlorine concentration in water leaving pipeline is no higher than that generally prevailing in existing system or is acceptable for domestic use.
  4. Disposal:

- a. Legally dispose of chlorinated water.
  - b. If chlorinated discharge may cause damage to environment, apply neutralizing chemical to chlorinated water to neutralize chlorine residual remaining in water.
5. After final flushing and before pipeline is connected to existing system or placed in service, certify that disinfectant level meets quality standards of the North Dakota Department of Health.
6. Provide sampling in accordance with the latest AWWA C651 standard with the frequency of one of the following options:
  - a. Option A: Take an initial sample and then resample again after a minimum of 16 hours per 1,200 feet of new water main, plus one set from the end of the line and at least one set from each branch greater than one pipe length. All sets of samples must pass for the main to be approved for release.
  - b. Options B: Let the water main site for a minimum of 16 hours without any water use. Collect two sets of samples a minimum of 15 minutes apart while the sampling taps are left running and without flushing the main. Sets of samples shall be collected every 1,200 feet of the new water main plus one set from the end of the line and at least one set from each branch greater than one pipe length. All sets of samples must pass for the main to be approved for release.

END OF SECTION 330110.58

## SECTION 330130.11 - TELEVISION INSPECTION OF SEWERS

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Pipeline flushing and cleaning.
2. Television inspection of sewer pipelines.
3. Audio-video recording of pipeline interior.

##### B. Related Requirements:

1. Section 015000 - Temporary Facilities and Controls: Safety requirements when bypassing sewage flow.
2. Section 333111 - Public Sanitary Sewerage Gravity Piping: Pipe materials, manholes, and accessories normally encountered with gravity sewerage piping.

#### 1.2 DEFINITIONS

- ##### A. DVD: An optical disc storage format, offering higher storage capacity than compact discs (CDs) while having the same dimensions.

#### 1.3 COORDINATION

- ##### A. Section 013000 - Administrative Requirements: Requirements for coordination.
- ##### B. Coordinate Work of this Section with Owner.

#### 1.4 SUBMITTALS

- ##### A. Section 013300 - Submittal Procedures: Requirements for submittals.

##### B. DVDs:

1. Submit three copies of completed narrated color DVDs identified by Project name, street name, right-of-way property name, and manhole numbers.
2. DVDs become property of Owner.

##### C. Inspection Logs:

1. Submit cleaning and television inspection logs for each section of sewer line to be rehabilitated.
2. Include following minimum information:



- a. Stationing and location of lateral services, wyes, or tees.
  - b. Date and clock time references.
  - c. Pipe joints.
  - d. Flow direction.
  - e. Footage readings in feet.
  - f. Screenshots of all defects (thumbnails).
  - g. Infiltration/inflow defects.
  - h. Cracks.
  - i. Leaks.
  - j. Offset joints.
  - k. Other information to assess condition of sewer.
- D. Submit specific detailed description of proposed bypass pumping system, including written description of plan addressing schedule, quantity, capacity, and location of pumping equipment.
- E. Submit spill plan to address any spills that might occur.

## 1.5 QUALITY ASSURANCE

- A. Perform Work according to NASSCO standards.

## PART 2 - PRODUCTS

### 2.1 DVDs

- A. Description: Digital video formatted discs.
- B. Audio track containing simultaneously recorded narrative commentary and evaluations of videographer, describing in detail condition of pipeline interior.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for application examination.
- B. Verify location of sewer pipelines to be inspected.

### 3.2 PREPARATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for application preparation.
- B. Cleaning:

1. Notify the Owner if the Contractor believes that the integrity of the existing pipe is not adequate for the cleaning operation to take place.
2. Flush and clean pipeline to remove sludge, dirt, sand, stone, grease, and other materials to ensure clear view of interior condition.

C. Obstruction:

1. Complete a reverse setup and perform inspection of the pipeline from the other end if an obstruction is encountered that impedes inspection of the pipeline.
2. Notify the Engineer immediately for resolution if additional obstruction is encountered after the reserve setup.

D. Roots:

1. Remove roots as necessary to complete inspection and televising of pipeline. Roots shall not be a reason for reverse set-up.

E. Protruding Tap Connection:

1. Notify Engineer of protruding tap connections that impede inspection and televising of the pipe.
2. Record shall be taken of protruding taps to be removed both before and after removal.
3. Remove protruding tap to within one-half inch of the mainline pipe wall.
4. Notify the Engineer if the Contractor believes that the integrity of the existing pipe is not adequate to complete removal of the protruding tap.

F. Debris:

1. Intercept flushed debris at next downstream manhole using weir or screening device.
2. Remove and dispose of debris off site.

G. Bypassing:

1. Furnish temporary bypass pumping system around Work area for time required to complete television inspection.
2. Provide standby pump of equal or greater capacity at bypass location.
3. Provide safety precautions, including barricades, lights, and flaggers..

H. Flow Control:

1. Provide temporary flow control as needed during televising operation.

### 3.3 APPLICATION

A. Closed-Circuit Television (CCTV) Camera System:

1. Use cameras specifically designed and constructed for closed-circuit sewer line inspection.
2. Use camera equipment with pan-and-tilt capability to view each lateral connection at multiple angles.

3. Produce a clear, in-focus picture of the entire periphery of the inside of the pipe for a minimum distance of six feet.
4. Use camera capable of moving both upstream and downstream with minimum 1,000 feet horizontal distance within one setup and using direct-reading cable position meter.

### 3.4 FIELD QUALITY CONTROL

#### A. Section 014000 - Quality Requirements: Requirements for inspecting and testing.

#### B. Pipeline Inspection:

1. Audio-video record sections of sewer pipeline between designated manholes.
2. Tilt camera up to view interior of manholes at the beginning and end of each segment televised.
3. Maintain accurate footage counter which shall display on the monitor at all times.
4. Begin footage measurements in at the interior face of the manhole wall.
5. Center camera inside pipe keeping it above the flow as reasonably possible.
6. Identify and record locations of flat grades, dips, deflected joints, open joints, broken pipe, protrusions into pipeline, and points of infiltration.
7. Locate and record service connections.
8. Record locations of pipeline defects, connection horizontal distance in feet, and direction from manholes.
9. Video record with pipe section plugged, as to view 100 percent of inside pipe diameter; use flow-control methods as specified for bypass pumping system to eliminate surcharging and reduce flow.
10. Notify the Engineer of the time and date of proposed work if nighttime work is necessary.
11. Use flow-control methods as specified for bypass pumping system to eliminate surcharging and to reduce flow.
12. Re-televiser the sewer and provide a new recording of good quality, if recording are of such poor quality that the Engineer is unable to evaluate the condition of the sewer, locate sewer service connections, or verify cleaning.

#### C. Site Cleaning:

1. Clean and restore the work areas prior to leaving the site.

#### D. Retrieval of Materials and Equipment:

1. Remove materials and equipment that may have become lodged in the sewer from the cleaning and televising operation.

END OF SECTION 330130.11

## SECTION 330505.31 - HYDROSTATIC TESTING

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes: Hydrostatic testing of pressure piping.
- B. Related Requirements:
  - 1. Section 331413 - Public Water Utility Distribution Piping: Pipe materials and accessories normally encountered with pressurized water distribution systems.

#### 1.2 REFERENCE STANDARDS

- A. American Water Works Association:
  - 1. AWWA C600 - Installation of Ductile-Iron Water Mains and Their Appurtenances.

#### 1.3 SUBMITTALS

- A. Section 013300 - Submittal Procedures: Requirements for submittals.
- B. Submit following items prior to start of testing:
  - 1. Testing procedures.
  - 2. List of test equipment.
  - 3. Testing sequence schedule.
  - 4. Provisions for disposal of flushing and test water.
  - 5. Certification of test gage calibration.
- C. Test and Evaluation Reports: Indicate results of piping tests.

#### 1.4 QUALITY ASSURANCE

- A. Perform Work according to North Dakota Department of Health standards.

### PART 2 - PRODUCTS

#### 2.1 HYDROSTATIC TESTING

- A. Equipment:
  - 1. Pressure pump.
  - 2. Pressure hose.

3. Water meter.
4. Test connections.
5. Pressure relief valve.
6. Pressure Gage: Calibrated to 0.1 psi.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation examination.
- B. Verify that piping is ready for testing.
- C. Verify that trenches are backfilled.
- D. Verify that pressure piping thrust restraints have been installed.

### 3.2 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Requirements for inspecting and testing.
- B. Testing of Pressure Piping:
  1. Test system according to AWWA C600 and following:
    - a. Hydrostatically test each portion of pressure pipe, including valved section, at not less than 150 psi. Do not test at a pressure that exceeds the design pressure of the pipe however.
    - b. Conduct hydrostatic testing for at least two hours.
    - c. Slowly fill with water portion of piping to be tested, expelling air from piping at high points.
    - d. Install corporation cocks at high points.
    - e. Close air vents and corporation cocks after air is expelled.
    - f. Raise pressure to specified test pressure.
    - g. Observe joints, fittings, and valves undergoing testing.
    - h. Remove and renew cracked pipes, joints, fittings, and valves that show visible leakage.
    - i. Retest.
    - j. Correct visible deficiencies and continue testing at same test pressure for additional two hours to determine leakage rate.
    - k. Maintain pressure within plus or minus 5.0 psi of test pressure.
    - l. Leakage is defined as quantity of water supplied to piping necessary to maintain test pressure during period of testing.
    - m. Compute maximum allowable leakage using following formula:
      - 1)  $L = [SD \times \sqrt{P}]/C$ .
      - 2) L = testing allowance, gph.

- 3)  $S$  = length of pipe tested, feet.
  - 4)  $D$  = nominal diameter of pipe, inches.
  - 5)  $P$  = average test pressure during hydrostatic testing, psig.
  - 6)  $C = 148,000$ .
  - 7) If pipe undergoing testing contains sections of various diameters, calculate allowable leakage from sum of computed leakage for each pipe size.
2. If testing of piping indicates leakage greater than that allowed, locate source of leakage, make corrections, and retest until leakage is within acceptable limits.
  3. Correct visible leaks regardless of quantity of leakage.

END OF SECTION 330505.31

## SECTION 330505.41 - AIR TESTING

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes: Low-pressure air testing of gravity sewer piping.
- B. Related Requirements:
  - 1. Section 333111 - Public Sanitary Sewerage Gravity Piping: Pipe materials, manholes, and accessories normally encountered with gravity sewerage piping.

#### 1.2 SUBMITTALS

- A. Section 013300 - Submittal Procedures: Requirements for submittals.
- B. Submit following items prior to start of testing:
  - 1. Testing procedures.
  - 2. List of test equipment.
  - 3. Testing sequence schedule.
  - 4. Provisions for disposal of flushing and test water.
  - 5. Certification of test gage calibration.
- C. Test and Evaluation Reports: Indicate results of piping tests.

#### 1.3 QUALITY ASSURANCE

- A. Perform Work according to North Dakota Department of Health standards.

### PART 2 - PRODUCTS

#### 2.1 AIR TESTING

- A. Equipment:
  - 1. Air compressor.
  - 2. Air supply line.
  - 3. Shutoff valves.
  - 4. Pressure regulator.
  - 5. Pressure relief valve.
  - 6. Stopwatch.
  - 7. Plugs.
  - 8. Pressure Gage: Calibrated to 0.1 psi.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation examination.
- B. Verify that piping is ready for testing.
- C. Verify that trenches are backfilled.

### 3.2 PREPARATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for preparation.
- B. Lamping:
  - 1. Lamp gravity piping after flushing and cleaning.
  - 2. Perform lamping operation by shining light at one end of each pipe section between manholes.
  - 3. Observe light at other end.
  - 4. Pipe not installed with uniform line and grade will be rejected.
  - 5. Remove and reinstall rejected pipe sections.
  - 6. Clean and lamp until pipe section is installed to uniform line and grade.
- C. Plugs:
  - 1. Plug outlets, wye branches, and laterals.
  - 2. Brace plugs to resist test pressures.

### 3.3 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Requirements for inspecting and testing.
- B. Low-Pressure Air Testing:
  - 1. Test each reach of gravity sewer piping between manholes.
  - 2. Introduce air pressure slowly to approximately 4 psig.
  - 3. Determine ground water elevation above spring line of piping.
  - 4. For every foot of ground water above spring line of piping, increase starting air test pressure by 0.43 psi.
  - 5. Do not increase pressure above 10 psig.
  - 6. Allow pressure to stabilize for at least five minutes.
  - 7. Adjust pressure to 3.5 psig or to increased test pressure as determined above when ground water is present.
  - 8. Do not make allowance for laterals.
  - 9. Minimum Testing Duration in Minutes Per 100 Feet:
    - a. Pipe Size 3 Inches: 0.2.
    - b. Pipe Size 4 Inches: 0.3.



- c. Pipe Size 6 Inches: 0.7.
  - d. Pipe Size 8 Inches: 1.2.
  - e. Pipe Size 10 Inches: 1.5.
  - f. Pipe Size 12 Inches: 1.8.
  - g. Pipe Size 15 Inches: 2.1.
  - h. Pipe Size 18 Inches: 2.4.
  - i. Pipe Size 21 Inches: 3.0.
  - j. Pipe Size 24 Inches: 3.6.
  - k. Pipe Size 27 Inches: 4.2.
  - l. Pipe Size 30 Inches: 4.8.
  - m. Pipe Size 33 Inches: 5.4.
  - n. Pipe Size 36 Inches: 6.0.
- 10. Record drop in pressure during testing period.
  - 11. If air pressure drops more than 1.0 psi during testing period, piping has failed.
  - 12. If 1.0-psi air pressure drop has not occurred during testing period, piping is acceptable; discontinue testing.
  - 13. If piping fails, test reach of piping in incremental stages until leaks are isolated, repair leaks, and retest entire reach between manholes.
  - 14. If unsatisfactory testing results are achieved, make necessary repairs and retest until result meets criteria.
  - 15. Repair visible leaks regardless of quantity of leakage.

END OF SECTION 330505.41

## SECTION 330505.43 - MANDREL TESTING

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes: Deflection testing of plastic sewer piping.
- B. Related Requirements:
  - 1. Section 333111 - Public Sanitary Sewerage Gravity Piping: Pipe materials, manholes, and accessories normally encountered with gravity sewerage piping.

#### 1.2 REFERENCE STANDARDS

- A. ASTM International:
  - 1. ASTM D2122 - Standard Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings.

#### 1.3 SUBMITTALS

- A. Section 013300 - Submittal Procedures: Requirements for submittals.
- B. Submit following items prior to start of testing:
  - 1. Testing procedures.
  - 2. List of test equipment.
  - 3. Testing sequence schedule.
  - 4. Provisions for disposal of flushing and test water.
  - 5. Certification of test gage calibration.
  - 6. Deflection mandrel drawings and calculations.
- C. Test and Evaluation Reports: Indicate results of piping tests.

### PART 2 - PRODUCTS

#### 2.1 DEFLECTION TESTING

- A. Equipment:
  - 1. Properly sized rigid ball or "go, no go" mandrel.
  - 2. Pull/retrieval ropes.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation examination.
- B. Verify that piping is ready for testing.
- C. Verify that trenches are backfilled.

### 3.2 PREPARATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for preparation.
- B. Lamping:
  - 1. Lamp gravity piping after flushing and cleaning.
  - 2. Perform lamping operation by shining light at one end of each pipe section between manholes.
  - 3. Observe light at other end.
  - 4. Pipe not installed with uniform line and grade will be rejected.
  - 5. Remove and reinstall rejected pipe sections.
  - 6. Clean and lamp until pipe section is installed to uniform line and grade.
- C. Plugs:
  - 1. Plug outlets, wye branches, and laterals.
  - 2. Brace plugs to resist test pressures.

### 3.3 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Requirements for inspecting and testing.
- B. If visual inspection specified in Section 330130.11 – Television Inspection of Sewers shows pipe deflection as determined by the Engineer, Contractor will perform deflection testing as specified in this section.
- C. Deflection Testing of Plastic Sewer Piping:
  - 1. Perform vertical ring deflection testing on PVC sewer piping after backfilling has been in place for at least 30 days, but not longer than 12 months.
  - 2. Allowable maximum deflection for installed plastic sewer pipe is no greater than five percent of original vertical internal diameter.
  - 3. Perform deflection testing using properly sized rigid ball or "go, no go" mandrel.
  - 4. Rigid Ball or Mandrel Diameter:
    - a. Not less than 95 percent of base or average ID of pipe.
    - b. Pipe Diameter: Comply with ASTM D2122.

5. Perform testing without mechanical pulling devices.
6. Locate, excavate, replace, and retest piping that exceeds allowable deflection.

END OF SECTION 330505.43

## SECTION 330509.33 - THRUST RESTRAINT FOR UTILITY PIPING

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Concrete Thrust Blocking.
  - 2. Mechanical Joint Restraint.
- B. Related Requirements:
  - 1. Section 312316.13 - Trenching: Trenching and backfilling requirements for Site utilities.
  - 2. Section 331413 - Public Water Utility Distribution Piping: Requirements for piping Work as required by this Section.

#### 1.2 REFERENCE STANDARDS

- A. American Water Works Association:
  - 1. AWWA C110
  - 2. AWWA C600 - Installation of Ductile-Iron Water Mains and Their Appurtenances.
- B. ASME International:
  - 1. ASME B1.1 - Unified Inch Screw Threads, UN and UNR Thread Form.
- C. ASTM International:
  - 1. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.
  - 2. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
  - 3. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
  - 4. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength.
  - 5. ASTM A325 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
  - 6. ASTM A536 - Standard Specification for Ductile Iron Castings.
  - 7. ASTM A563 - Standard Specification for Carbon and Alloy Steel Nuts.
  - 8. ASTM A588/A588M - Standard Specification for High-Strength Low-Alloy Structural Steel, up to 50 ksi Minimum Yield Point, with Atmospheric Corrosion Resistance.
  - 9. ASTM B633 - Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel.
  - 10. ASTM E8 - Tension Testing of Metallic Materials.
  - 11. ASTM F436 - Standard Specification for Hardened Steel Washers.

### 1.3 COORDINATION

- A. Section 013000 - Administrative Requirements: Requirements for coordination.
- B. Coordinate Work of this Section with installation of fittings and joints that require restraint.

### 1.4 SUBMITTALS

- A. Section 013300 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit manufacturer catalog information for restrained joint details and installation instructions.
- C. Shop Drawings:
  - 1. Indicate restrained joint details and materials being used.
  - 2. Submit layout drawings showing piece numbers and locations.
  - 3. Indicate restrained joint locations.
- D. Manufacturer Instructions: Submit detailed instructions on installation requirements, including storage and handling procedures.

### 1.5 CLOSEOUT SUBMITTALS

- A. Section 017000 - Execution and Closeout Requirements: Requirements for submittals.
- B. Project Record Documents: Record actual locations of joint restraints.

### 1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three years' documented experience.

### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Store materials according to manufacturer instructions.
- D. Protection:
  - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
  - 2. Provide additional protection according to manufacturer instructions.

## 1.8 EXISTING CONDITIONS

### A. Field Measurements:

1. Verify field measurements prior to fabrication.
2. Indicate field measurements on Shop Drawings.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE AND DESIGN CRITERIA

- A. Provide concrete thrust blocking as indicated on the Drawings.
- B. When indicated on the Drawings, provide restraint devices for mechanical joint restraints and appurtenances in addition to concrete thrust blocking.

### 2.2 MECHANICAL JOINT RESTRAINTS

#### A. Manufacturer:

1. Megalug by EBAA Iron, Inc.
2. One-Lok SLCE with CORRSAFE coating by Sigma Corporation.
3. or approved equal.

#### B. Design:

1. Consist of multiple gripping wedges incorporated into a follower gland meeting the applicable requirements of ASNI/AWWA C110/A21.10 for nominal pipe sizes 3 inch through 36 inch.
2. Include a minimum safety factor of 2:1 in all sizes for rating for water pressure.

#### C. Material:

1. Cast from grades 65-45-12 ductile iron material in accordance with ASTM A536 for gland body, wedges and wedge actuating components.

#### D. Coating:

1. Consist of a minimum of two coats of liquid thermoset epoxy coating with heat cure to follow each coat.
2. Surface pretreated with a phosphate wash, rinse and sealer before drying.
3. Electrostatically applied and heat cured.
4. Polyester based powder to provide corrosion, impact and UV resistance.

#### E. Approvals:

1. Listed by Underwriters Laboratories in the 4 inch through 12 inch sizes.
2. Factory Mutual Approved in the 4 inch through 12 inch sizes.

3. Meet or exceed the requirements of ASTM F1674 of the latest revision for Mechanical Joint Restraints, 4 inch through 24 inch.

## 2.3 MATERIALS

### A. Steel:

1. High-Strength Low-Alloy Steel: Comply with ASTM A588/A588M, heat treated.
2. High-Strength Low-Alloy Steel: Comply with ASTM A588/A588M.
3. Carbon Steel: Comply with ASTM A36/A36M.

## 2.4 FINISHES

### A. Zinc Plating:

1. Factory applied.
2. Comply with ASTM B633.

### B. Galvanizing:

1. Factory applied.
2. Comply with ASTM A153/A153M.

## 2.5 CONCRETE

1. Compressive Strength 4000 psi at 28 days.

# PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation examination.
- B. Verify that pipe and fittings are ready to receive Work.
- C. Field measure and verify conditions for installation of Work.

## 3.2 PREPARATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation preparation.



### 3.3 INSTALLATION

- A. According to AWWA C600.
- B. Install joint restraint system such that joints are mechanically locked together to prevent joint separation.
- C. Install concrete thrust blocks according to the Drawings.
- D. Install mechanical joint restraint by conventional tools and installation procedures per AWWA C600, while retaining full mechanical joint deflection during assembly. Ensure proper actuation of the gripping wedges with torque limiting twist off nuts.

### 3.4 TOLERANCES

- A. Section 014000 - Quality Requirements: Requirements for tolerances.

END OF SECTION 330509.33

## SECTION 330597 - IDENTIFICATION AND SIGNAGE FOR UTILITIES

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Trace wire for placement above direct-buried utility.
2. Permanent and temporary utility markers.

##### B. Related Requirements:

1. Section 312316.13 - Trenching: Backfilling considerations for installation of trace wire.
2. Section 331413 - Public Water Utility Distribution Piping: Piping, valves, and appurtenances requiring identification marking.
3. Section 333111 - Public Sanitary Sewerage Gravity Piping: Piping, valves, and appurtenances requiring identification marking.

#### 1.2 REFERENCES

##### A. ASTM International:

1. ASTM B910 / B910M: Standard Specifications for Annealed Copper-Clad Steel Wire.

#### 1.3 SUBMITTALS

##### A. Section 013300 - Submittal Procedures: Requirements for submittals.

##### B. Product Data: Submit manufacturer catalog information for each specified product.

#### 1.4 CLOSEOUT SUBMITTALS

##### A. Section 017000 - Execution and Closeout Requirements: Requirements for submittals.

##### B. Project Record Documents: Record actual locations of products installed.

#### 1.5 MAINTENANCE MATERIAL SUBMITTALS

##### A. Section 017000 - Execution and Closeout Requirements: Requirements for maintenance materials.

## 1.6 QUALITY ASSURANCE

- A. Trace Wire:
  - 1. Verify all installed trace wire is operational using Owner's locating equipment.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 – Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Accept materials on site in undamaged, unopened container, bearing manufacturer's original labels. Inspect for damage.
- C. Protect materials from damage by storing in a secure location.

## 1.8 COORDINATION

- A. Section 013000 – Administrative Requirements: Requirements for coordination
- B. Furnish testing schedule for products requiring owner testing.

## PART 2 - PRODUCTS

### 2.1 TRACE WIRE

- A. Manufacturers:
  - 1. Copperhead Industries, LLC  
PO Box 1081  
Monticello, MN 55362
- B. Trace wire for direct bury applications:
  - 1. 12 AWG high-strength copper clad steel (CCS) wire.
  - 2. 300-lb minimum rated break strength.
  - 3. 30 mil HDPE insulation.
- C. Trace wire for directional drilling applications:
  - 1. Extra high-strength copper clad steel (CCS) wire.
  - 2. 2700-lb minimum rated break strength.
  - 3. 45 mil HDPE insulation.
- D. Trace wire for pipe bursting:
  - 1. 3/16" high-strength stranded copper clad steel (CCS) wire.
  - 2. 4700-lb minimum rated break strength.
  - 3. 50 mil HDPE insulation.

- E. Insulation color coded to marked utility according to the American Public Works Association (APWA) uniform color standards.

## 2.2 SPLICE CONNECTORS

- A. Manufacturers:
  - 1. Copperhead Industries, LLC  
PO Box 1081  
Monticello, MN 55362
- B. Trace wire splices shall be made using a sealant-filled splice connector designed for direct bury installation in damp, wet, or submersible locations.

## 2.3 TERMINAL BOXES

- A. Manufacturers:
  - 1. Copperhead Industries, LLC (SnakePit & Cobra T3)
  - 2. Valvco, Inc.
  - 3. Approved equal.
- B. Flush mount terminal boxes:
  - 1. Minimum 36" long, 2-1/2" diameter ABS shaft.
  - 2. Flared shaft bottom.
  - 3. Permanently magnetic cast or ductile iron cover, frame and lid.
  - 4. Variable size wire terminal blocks beneath lid.
  - 5. Integral direct connection terminal to allow connection of locator without removing the lid.
  - 6. 2 terminals with jumper.
  - 7. Locking cover with pentagonal nut.
  - 8. Lid stamped with utility type and color coded to marked utility according to the American Public Works Association (APWA) uniform color standards.
- C. Above grade terminal boxes:
  - 1. PVC terminal box with 1" diameter conduit connection.
  - 2. Minimum 2 terminals with jumper.
  - 3. Color coded to marked utility according to the American Public Works Association (APWA) uniform color standards.

## 2.4 GROUNDING ANODE

- A. Manufacturers:
  - 1. Copperhead Industries, LLC  
PO Box 1081  
Monticello, MN 55362

2. Substitutions: Section 016000 – Product Requirements.

B. Drive-in type magnesium anode grounding rod.

1. Minimum 1-lb magnesium.
2. Minimum 20' of factory installed copper clad steel wire.

2.5 UTILITY MARKERS

A. Permanent

1. Manufacturer
  - a. Carsonite: CRM Utility Marker
2. Color:
  - a. Sanitary: Green
  - b. Water: Blue

B. Temporary

1. 2"x2" pine wood, 36" above grade.
2. Painted:
  - a. Sanitary: Green
  - b. Water: Blue

PART 3 - EXECUTION

3.1 INSTALLATION

A. Trace Wire:

1. Install trace wire in such a manner that allows proper access for connection of line tracing equipment, and successful signal reception without distortion or loss of signal due to damaged wires, loops, coils, kinks, discontinuities, unapproved connections/terminations, or multiple instances of trace wire installed in close proximity to one another.
2. Install trace wire system as a continuous single wire. No looping, coiling, or kinking of wire is allowed.
3. Attach trace wire to utility pipes and services at 10' intervals using tape or plastic zip ties installed all the way around the utility pipe. Allow for 1 to 3 inches of slack between the pipe and trace wire between attachment points.
4. Install mainline pipe trace wire continuously on the south or east side of utility pipes, running around or through valves, manholes, or other structures as shown on the details.
5. Make all connections between individual trace wires with approved splice connectors only.
6. Repair immediately any damage occurring during installation of the trace wire using an approved waterproof method. Taping and/or spray coating shall not be allowed.
7. Connect the new and existing trace wires using approved splice connectors where existing trace wire is encountered on an existing utility to be tied into or extended.

8. Leave a 3' pigtail of trace wire lay horizontally beyond the pipe where trace wire is to be terminated at a mainline dead end/stub. Terminate the line by installing an approved splice connector with magnesium grounding anode.
9. Install branching mainline, service pipe, or hydrant lead trace wire as a single continuous wire between the mainline wire and a terminal box as shown in the details. Connect to the mainline wire with an approved connector without cutting the mainline trace wire. No looping, coiling, or kinking of wire is allowed.
10. Install trace wire for boring, directional drilling, and pipe bursting applications as one single continuous wire. Splice connectors are prohibited.
11. Install grounding anode whenever the line is terminated.
12. Install grounding anodes vertically and penetrating undisturbed soil. Anodes not driven into undisturbed soil will be considered defective work.
13. At dead ends, connect the grounding anode leader wire to the trace wire and trim the anode leader wire to length.
14. At terminal boxes, connect the outside leader wire directly to one of the terminals. Do not connect the anode leader wire directly to the trace wire.

B. Flush-mount terminal boxes:

1. Install flush-mount terminal boxes at finished ground elevations as shown in the drawings and details, or as directed by the Engineer.
2. Provide 3' of extra trace wire in the flush mount terminal box to allow for connection of line tracing equipment.
3. Connect trace wire to flush-mount terminal box cap according to manufacturer's instructions.

C. Above grade terminal boxes:

1. Install above grade terminal boxes as shown in the drawings and details, or as directed by the Engineer.
2. Provide 4" of extra trace wire in the terminal box to allow for connection of line tracing equipment.
3. Connect trace wire to the terminal post according to manufacturer's instructions.

### 3.2 FIELD QUALITY CONTROL

A. Section 014000 – Quality Requirements.

B. Prohibited products and methods:

1. Uninsulated trace wire or insulated trace wire using any insulation other than HDPE.
2. Twist on wire nuts or other unapproved connectors.
3. Tape or spray on waterproofing.
4. Any installation involving multiple instances of wire twisted together or in close proximity to one another.
5. Connecting the trace wire to any conductive utilities.
6. Looping, coiling, or kinking the trace wire.
7. Using any other HDPE jacket color than specified by the American Public Works Association (APWA) uniform color standards.
8. Leaving excess trace wire in the trench.

9. Utilization of connectors in boring, directional drilling, and pipe bursting applications.

C. Post-installation test:

1. Locate all new trace wire installations using standard line tracing equipment, witnessed by the contractor, Engineer, or Engineer's Representative, and facility owner as applicable, prior to acceptance of ownership.
2. Perform this verification upon completion of rough grading and again prior to final acceptance of the project.
3. Continuity testing in lieu of line tracing shall not be accepted.

### 3.3 TRACE WIRE SCHEDULE

A. Public water infrastructure as shown on the plans:

1. Mains
2. Service lines
3. Hydrant leads

B. Public sanitary sewer infrastructure as shown on the plans:

1. Gravity mains
2. Forcemains
3. Service lines

C. Public storm sewer infrastructure as shown on the plans:

1. Forcemains

END OF SECTION 330597

## SECTION 331413 - PUBLIC WATER UTILITY DISTRIBUTION PIPING

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Pipe and fittings for public line.
2. Tapping sleeves and valves.
3. Bedding and cover materials.

##### B. Related Requirements:

1. Section 310513 - Soils for Earthwork: Soils for backfill in trenches.
2. Section 310516 - Aggregates for Earthwork: Aggregate for backfill in trenches.
3. Section 312316.13 - Trenching: Excavation and backfill as required by this Section.
4. Section 330110.58 - Disinfection of Water Utility Piping Systems: Disinfection of water mains and appurtenances.
5. Section 330509.33 - Thrust Restraint for Utility Piping: Tied joint restraint system to anchor and resist forces developed in underground closed pipeline systems.
6. Section 330597 - Identification and Signage for Utilities: Pipe markers.
7. Section 331417 - Site Water Service Utility Laterals: Water main service connections.
8. Section 331419 - Valves and Hydrants for Water Utility Service: Fire hydrants, valves, and valve boxes for fire hydrant and water main installations.

#### 1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

##### A. Section 012000 - Price and Payment Procedures: Contract Sum/Price modification procedures.

##### B. Pipe :

1. Basis of Measurement: By linear foot.
2. Basis of Payment: Includes excavation and backfill; pipe, and appurtenances, disinfection, couplings, trace wire system, insulation, bedding and backfill.

##### C. Fittings:

1. Basis of Measurement: By pound weight.
2. Basis of Payment: Includes gaskets, flanges, retraining glands, installation, bedding, concrete thrust restraints, and accessories. Quantity will be installed items at ductile iron class 153 fitting weights (MJ x MJ) in the 2017 Sigma Corporation Catalog.

##### D. Taps:

1. Basis of Measurement: By each.
2. Basis of Payment: Includes tapping sleeve, tapping valves, and accessories.



### 1.3 REFERENCE STANDARDS

#### A. American Society of Mechanical Engineers:

1. ASME B16.1 - Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250.

#### B. ASTM International:

1. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.
2. ASTM A123.
3. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength.
4. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12 400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>).
5. ASTM D1785 - Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120.
6. ASTM D2241 - Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series).
7. ASTM D3035 - Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter.
8. ASTM D3139 - Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals.
9. ASTM D6938 - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).
10. ASTM F477 - Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe.

#### C. American Water Works Association:

1. AWWA C104 - Cement-Mortar Lining for Ductile-Iron Pipe and Fittings.
2. AWWA C105 - Polyethylene Encasement for Ductile-Iron Pipe Systems.
3. AWWA C110 - Ductile-Iron and Gray-Iron Fittings.
4. AWWA C111 - Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
5. AWWA C115 - Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges.
6. AWWA C151 - Ductile-Iron Pipe, Centrifugally Cast.
7. AWWA C153 - Ductile-Iron Compact Fittings.
8. AWWA C605 - Underground Installation of Polyvinyl Chloride (PVC) and Molecularly Oriented Polyvinyl Chloride (PVCO) Pressure Pipe and Fittings.
9. AWWA C606 - Grooved and Shouldered Joints.
10. AWWA C900 - Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 In. Through 60 In. (100 mm Through 1,500 mm), for Water Transmission and Distribution.

#### D. Manufacturers Standardization Society of the Valve and Fittings Industry:

1. MSS SP-60 - Connecting Flange Joints between Tapping Sleeves and Tapping Valves.

#### E. National Fire Protection Association:

1. NFPA 24 - Standard for the Installation of Private Fire Service Mains and Their Appurtenances.

## F. NSF International:

1. NSF 61 - Drinking Water System Components - Health Effects.
2. NSF 372 - Drinking Water System Components - Lead Content.

## 1.4 COORDINATION

- A. Section 013000 - Administrative Requirements: Requirements for coordination.
- B. Coordinate Work of this Section with termination of water main connection at Site boundary, connection to municipal water utility service and trenching.

## 1.5 SUBMITTALS

- A. Section 013300 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit manufacturer information regarding pipe materials and pipe fittings.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

## 1.6 CLOSEOUT SUBMITTALS

- A. Section 017000 - Execution and Closeout Requirements: Requirements for submittals.

## 1.7 QUALITY ASSURANCE

- A. Materials in Contact with Potable Water: Certified according to NSF 60 and 61 and NSF 372. A product will be considered as meeting these standards if so certified by NSF, the Underwriters Laboratories, or other organization accredited by ANSI to test and certify such products.
- B. Perform Work according to North Dakota Department of Health standards.

## 1.8 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three years' documented experience.

## 1.9 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Storage:

1. Store materials according to manufacturer instructions.
2. Block individual and stockpiled pipe lengths to prevent moving.
3. Do not place pipe or pipe materials on private property or in areas obstructing pedestrian or vehicle traffic.
4. Store PE and PVC materials out of sunlight.

D. Protection:

1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
2. Provide additional protection according to manufacturer instructions.

## 1.10 WARRANTY

- A. Section 017000 - Execution and Closeout Requirements: Requirements for warranties.

## PART 2 - PRODUCTS

### 2.1 WATER PIPING

A. Ductile-Iron Pipe:

1. Comply with AWWA C151.
2. Bituminous Outside Coating: Comply with AWWA C151.
3. Pipe Mortar Lining:
  - a. Comply with AWWA C104.
  - b. Thickness: Double.
4. PE Encasement: Comply with AWWA C105.
5. Pipe Class:
  - a. Comply with AWWA C151.
  - b. Class 53.
6. Fittings:
  - a. Material: Ductile iron; comply with AWWA C110.
  - b. Compact Fittings: Comply with AWWA C153.
  - c. Coating and Lining:
    - 1) Bituminous Coating: Comply with AWWA C110.
    - 2) Cement-Mortar Lining: Comply with AWWA C104; double thickness.
  - d. All pipe sizes.
7. Joints:
  - a. Mechanical and Push-on Joints: Comply with AWWA C111.
  - b. Restrained Joints: Boltless, push-on type, joint restraint independent of joint seal, when indicated on the drawings.
8. Jackets: PE; comply with AWWA C105.

B. PVC:

1. Comply with AWWA C900, Class 235
2. Fittings (4" to 8" pipe):

- a. Comply with AWWA C900 and C907
  - b. Blue in color.
  - c. Pipe Sizes: 4" to 8"
  - d. Manufacturer by IPEX USA or approved equal.
3. Fittings (all sizes):
  - a. Material Ductile iron; comply with AWWA C110.
  - b. Compact Fittings: comply with AWWA C153.
  - c. Coating and Lining:
    - 1) Bituminous Coating: Comply with AWWA C110.
    - 2) Cement-Mortar Lining: Comply with AWWA C104; double thickness.
  - d. Joints:
    - 1) Comply With AWWA C111.
      - a) Push-on Joints
      - b) Mechanical Joints for restrained fittings only
    - 2) Restrained Joints: Per Section 330509.33 - Thrust Restraint for Utility Piping, when indicated on the drawings.
  - e. Jackets: PE; comply with AWWA C105.
4. Joints:
  - a. Comply with ASTM D3139 and F477.
  - b. Seals: PVC flexible elastomeric.
  - c. Solvent-cement couplings are not permitted.

## 2.2 TAPPING SLEEVES AND VALVES

### A. Tapping Sleeves:

1. Manufacturers:
  - a. Romac Industries, Inc.
  - b. Powerseal.
  - c. Ford
  - d. or equal.
  - e. Substitutions: As specified in Section 016000 - Product Requirements.
2. Description:
  - a. Material: Stainless Steel.

### B. Tapping Valves:

1. Manufacturers:
  - a. As listed in Section 331419 – Valves & Hydrants for Utility Service.
  - b. Substitutions: As specified in Section 016000 - Product Requirements
2. Description:
  - a. AWWA C509. Resilient-seated gate vales with non-rising stem.
  - b. Inlet flanges, conforming to ANSI B16.1, Class 125 and MSS Sp-60.
  - c. Mechanical joint outlets conforming to AWWA C111.
  - d. Mark manufacturer's name and pressure rating on valve body.

## 2.3 COUPLINGS

1. Products:
  - a. Macro by Romac Industries, Inc.
    - 1) 4" to 12"
  - b. Hymax by Krausz USA
    - 1) Greater than 12"
  - c. or equal.
  - d. Substitutions: As specified in Section 016000 - Product Requirements.
2. Description:
  - a. Two (2) bolt wide range coupling.

## 2.4 VALVES AND FIRE HYDRANTS

- A. As specified in Section 331419 - Valves and Hydrants for Water Utility Service.

## 2.5 MATERIALS

- A. Bedding and Cover:
  1. Bedding: Fill Type A5 as specified in Section 310516 - Aggregates for Earthwork.
  2. Cover: Fill Type A5 as specified in Section 310516 - Aggregates for Earthwork.
  3. Soil Backfill from above Pipe to Finish Grade:
    - a. Soil Type S2 as specified in Section 310513 - Soils for Earthwork.
    - b. Subsoil with no rocks greater than 6 inches in diameter, frozen earth, or foreign matter.

## 2.6 FINISHES

- A. Steel: Hot-dip galvanized after fabrication, according to ASTM A123/A123M.

## 2.7 ACCESSORIES

- A. Thrust Restraints: As specified in Section 330509.33 - Thrust Restraint for Utility Piping.
- B. Tracer Wire: As specified in Section 330597 - Identification and Signage for Utilities.
- C. Steel Rods, Bolt, Lugs, Nuts, and Brackets:
  1. 304 Stainless Steel.
- D. Protective Coating:
  1. Bituminous coating.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation examination.
- B. Verify that existing utility water main size, location, and invert are as indicated on Drawings.

### 3.2 PREPARATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation preparation.
- B. Coordination with City:
  - 1. City contact for all coordination issues shall be Ryan James (701-200-9099).
- C. Pipe Cutting:
  - 1. Cut pipe ends square, ream pipe and tube ends to full pipe diameter, and remove burrs.
  - 2. Use only equipment specifically designed for pipe cutting; use of chisels or hand saws is not permitted.
  - 3. Grind edges smooth with beveled end for push-on connections.
- D. Remove scale and dirt on inside and outside before assembly.
- E. Prepare pipe connections to equipment with flanges or unions.

### 3.3 INSTALLATION

- A. Bedding:
  - 1. Excavation:
    - a. As specified in Section 312316.13 - Trenching.
    - b. Hand trim for accurate placement of pipe to elevations as indicated on Drawings.
  - 2. Dewater excavations to maintain dry conditions and to preserve final grades at bottom of excavation.
  - 3. Place bedding material at trench bottom, level fill materials in one continuous layer not exceeding 6 inches of compacted depth, and compact to 90 percent of maximum density.
- B. Piping:
  - 1. Comply with AWWA C605.
  - 2. Handle and assemble pipe according to manufacturer instructions and as indicated on Drawings.
  - 3. Steel Rods, Bolts, Lugs, and Brackets: Coat buried steel before backfilling.
  - 4. Ductile-Iron Piping and Fittings: Comply with AWWA C600.
  - 5. Field Welding Materials: Comply with AWWA C206.

6. Flanged Joints: Do not use in underground installations except within structures.
7. Route pipe in straight line, and re-lay pipe that is out of alignment or grade.
8. High Points:
  - a. Install pipe with no high points.
  - b. If unforeseen field conditions arise that necessitate high points, install air-release valves as directed by Engineer.
9. Bearing:
  - a. Maintain bearing along entire length of pipe.
  - b. Excavate bell holes to permit proper joint installation.
  - c. Do not lay pipe in wet or frozen trench.
10. Prevent foreign material from entering pipe during placement.
11. Allow for expansion and contraction without stressing pipe or joints.
12. Close pipe openings with watertight plugs during Work stoppages.
13. Install access fittings to permit disinfection of water system performed under Section 330110.58 - Disinfection of Water Utility Piping Systems.
14. Cover:
  - a. Establish elevations of buried piping with not less than 7.5 feet of cover.
  - b. Measure depth of cover from final surface grade to top of pipe barrel.
15. Tracer Wire: As specified in Section 330597 - Identification and Signage for Utilities.

C. Separation Distances from Contamination Sources:

1. For maximum protection of municipal water systems where water mains and sewers cross, the following methods of construction for various conditions are recommended.
2. Parallel Installation:
  - a. Water mains shall be laid at least 10 feet horizontally from any existing or proposed gravity sanitary or storm sewer, sanitary forcemain, septic tank, or subsoil treatment system. The distance shall be measured edge to edge.
3. Crossings:
  - a. Water mains crossing sewers shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer with preference to the water main located above the sewer.
  - b. At crossings, one full length of water pipe shall be located so both joints will be as far from the sewer as possible. Special structural support for the water and sewer pipes may be required. Where water main crosses over an existing sewer.
4. Sewer Manholes
  - a. No water pipe shall pass through or come in contact with any part of a sewer manhole. Water main should be located at least 10 feet from sewer manholes.

D. Valves and Hydrants: As specified in Section 331419 - Valves and Hydrants for Water Utility Service.

E. Tapping Sleeves and Valves: As indicated on Shop Drawings and according to manufacturer instructions.

F. PE Encasement:

1. Encase piping in PE as indicated on Drawings to prevent contact with surrounding backfill material.
2. Comply with AWWA C105.

- 3. Terminate encasement 3 to 6 inches above ground where pipe is exposed.
- G. Thrust Restraints: As specified in Section 330509.33 - Thrust Restraint for Utility Piping.
- H. Service Connections: As specified in Section 331417 - Site Water Service Utility Laterals.
- I. Backfilling:
  - 1. Backfill around sides and to top of pipe with cover fill in minimum lifts of 6 inches, tamp in place, and compact to 90 percent of Standard Proctor (ASTM 698) maximum dry density.
  - 2. Place and compact material immediately adjacent to pipes to avoid damage to pipe and prevent pipe misalignment.
  - 3. Maintain moisture content of bedding material to attain required relative compaction.
  - 4. Backfilling: Backfill above pipe as specified in Section 312316.13 - Trenching.
- J. Disinfection of Potable Water Piping Systems: As specified in Section 330110.58 - Disinfection of Water Utility Piping Systems.
- K. Installation Standards: Install Work according to North Dakota Department of Health standards.

### 3.4 TOLERANCES

- A. Section 014000 - Quality Requirements: Requirements for tolerances.
- B. Install pipe to indicated elevation within tolerance of 5/8 inch.

### 3.5 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Requirements for inspecting and testing.
- B. Testing:
  - 1. Pressure Testing: As specified in Section 330505.31 – Hydrostatic Testing.
  - 2. Compaction Testing:
    - a. Comply with ASTM D698 and ASTM D6938.
    - b. Testing Frequency: one test along utility trenches at maximum 500 foot intervals per 2 feet of vertical lift.
    - c. If tests indicate Work does not meet specified requirements, remove Work, replace, and retest.

END OF SECTION 331413



## SECTION 331417 - SITE WATER SERVICE UTILITY LATERALS

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Pipe and fittings for water service connections to buildings.
2. Corporation stop assemblies.
3. Curb stop assemblies.
4. Backflow preventers.
5. Meter setting equipment.
6. Meter boxes.
7. Trenching, bedding, and cover.

##### B. Related Requirements:

1. Section 310513 - Soils for Earthwork: Backfill-soil type.
2. Section 310516 - Aggregates for Earthwork: Bedding- and cover-material type.
3. Section 312316.13 - Trenching: Excavation of pipe trench.
4. Section 330110.58 - Disinfection of Water Utility Piping Systems: Flushing and disinfecting of water system.
5. Section 330509.33 - Thrust Restraint for Utility Piping: Thrust restraints as required by this Section.

#### 1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

##### A. Section 012000 - Price and Payment Procedures: Contract Sum/Price modification procedures.

##### B. Pipe and Fittings:

1. Basis of Measurement: By linear foot.
2. Basis of Payment: Includes hand-trimming excavation, pipe and fittings, bedding, thrust restraints, connection to service piping, trace wire system, disinfection, and municipal utility water source.

##### C. Water Service Connection

1. Basis of Measurement: By unit.
2. Basis of Payment: Includes service saddle, corporation stop, curb stop, curb box and cover, connection to existing service line (if applicable), fittings, and accessories.

#### 1.3 REFERENCE STANDARDS

##### A. American Society of Mechanical Engineers:

1. ASME B16.18 - Cast Copper Alloy Solder Joint Pressure Fittings.
2. ASME B16.22 - Wrought Copper and Copper Alloy Solder Joint Pressure Fittings.

B. American Society of Sanitary Engineering:

1. ASSE 1012 - Performance Requirements for Backflow Preventers with an Intermediate Atmospheric Vent.
2. ASSE 1013 - Performance Requirements for Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Backflow Preventers.

C. ASTM International:

1. ASTM B62 - Standard Specification for Composition Bronze or Ounce Metal Castings.
2. ASTM B88 - Standard Specification for Seamless Copper Water Tube.
3. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>).
4. ASTM D1785 - Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120.
5. ASTM D2241 - Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series).
6. ASTM D2466 - Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40.
7. ASTM D2855 - Standard Practice for the Two-Step (Primer and Solvent Cement) Method of Joining Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Pipe and Piping Components with Tapered Sockets.
8. ASTM D6938 - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

D. American Welding Society:

1. AWS A5.8/A5.8M - Specification for Filler Metals for Brazing and Braze Welding.

E. American Water Works Association:

1. AWWA C509 - Resilient-Seated Gate Valves for Water Supply Service.
2. AWWA C600 - Installation of Ductile-Iron Mains and Their Appurtenances.
3. AWWA C800 - Underground Service Line Valves and Fittings.
4. AWWA C901 - Polyethylene (PE) Pressure Pipe and Tubing, 1/2 In. (13 mm) Through 3 In. (76 mm), for Water Service.
5. AWWA M6 - Water Meters - Selection, Installation, Testing, and Maintenance.

F. NSF International:

1. NSF 61 - Drinking Water System Components - Health Effects.
2. NSF 372 - Drinking Water System Components - Lead Content.

## 1.4 SUBMITTALS

A. Section 013300 - Submittal Procedures: Requirements for submittals.

- B. Product Data: Submit manufacturer information regarding pipe materials, pipe fittings, corporation stop assemblies, curb stop assemblies, meters, meter setting equipment, service saddles, backflow preventers, and accessories.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Manufacturer Instructions: Submit detailed instructions on installation requirements, including storage and handling procedures.

## 1.5 CLOSEOUT SUBMITTALS

- A. Section 017000 - Execution and Closeout Requirements: Requirements for submittals.
- B. Project Record Documents: Record actual locations of piping mains, curb stops, connections, thrust restraints, pressure-pipe centerline elevations, and gravity-pipe invert elevations.
- C. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

## 1.6 QUALITY ASSURANCE

- A. Materials in Contact with Potable Water: Certified according to NSF 60 and 61 and NSF 372. A product will be considered as meeting these standards if so certified by NSF, the Underwriters Laboratories, or other organization accredited by ANSI to test and certify such products.
- B. Perform Work according to North Dakota Department of Health standards.

## 1.7 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three years' documented experience.

## 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Store materials according to manufacturer instructions.
- D. Protection:
  - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
  - 2. Provide additional protection according to manufacturer instructions.

## PART 2 - PRODUCTS

### 2.1 WATER PIPING AND FITTINGS

#### A. Copper Tubing:

1. Comply with ASTM B88.
2. Type: K, annealed.
3. Fittings: Cast copper; ASME B16.18 or wrought copper; ASME B16.22.
4. Joints: Compression connection.

#### B. PE Pipe:

1. Comply with AWWA C901, ASTM D2239, SDR 7, PE4710, I.P.S.
2. Fittings:
  - a. Type: Molded.
  - b. Comply with AWWA C901,
3. Joints: Compression.

#### C. Pipe sizes

1. 1", 1 ½" and 2"
2. Larger than 2" see Section 331413.00 – Public Water Utility Distribution Piping.

### 2.2 CORPORATION STOP ASSEMBLIES

#### A. Manufacturers:

1. A.Y. McDonald Mfg. Co.  
PO Box 508  
Dubuque IA 52004
2. Ford Meter Box Company, Inc.  
775 Manchester Avenue  
Wabash, Indiana 46992
3. Substitutions: As specified in Section 016000 - Product Requirements
4. or equal.

#### B. Corporation Stops:

1. Comply with ASTM B62.
2. Body: Brass or red brass alloy.
3. Inlet End: Threaded for tapping according to AWWA C800.
4. Outlet End: Suitable for service pipe specified.
5. Corporation Stops for 1" copper services shall be flared or compression style plug corporations A.Y. McDonald 4701 and 4701-22 series or Ford F600 and F1000 series or Equal.
6. Corporation Stops for 1 ½" and 2" copper services shall be ball corporation style either flared or compression McDonald 4704B and 4704B-22 Series or Ford FB700 and FB1100 series or Equal.

7. Corporation Stops for 1" polyethylene services shall be compression style McDonald 4701-33 series or Ford F1001 series or Equal.
8. Corporations for 1 1/2" and 2" polyethylene services shall be compression ball type McDonald 4704B-33, Ford BF1101 series or Equal.
9. Use of the proper size of insert stiffeners is required for compression corporations for polyethylene.

C. Service Saddles:

1. Type: Double strap. Stainless steel, gasketed, full width sleeve with integral tapped outlet.
2. Ford FS303, PowerSeal 3412AS, or Romac 306.
3. or Equal

## 2.3 CURB STOP ASSEMBLIES

A. Manufacturers:

1. A.Y. McDonald Mfg. Co.  
PO Box 508  
Dubuque IA 52004
2. Ford Meter Box Company, Inc.  
775 Manchester Avenue  
Wabash, Indiana 46992
3. Substitutions: As specified in Section 016000 - Product Requirements.
4. or Equal.

B. Curb Stops:

1. Body: Brass or red brass alloy.
2. Comply with ASTM B62.
3. Valve Type: Ball.
4. Sealing: Positive pressure.
5. Curb stops for copper services shall be either flared or compression McDonald 6104 and 6104-22 series, Ford B22 or B44 series or Equal.
6. Curb stops for polyethylene services shall be McDonald 6104-33 or Ford B66 series or Equal.
7. Use of proper size of insert stiffeners is required for compression joints for polyethylene.

C. Curb Boxes and Covers:

1. McDonald 5622 or Equal
2. Body:
  - a. Cast iron.
  - b. 8' total height
  - c. 1 1/2" riser
3. Type: Extension.
4. Base: Minneapolis.
5. Lid:
  - a. Inscription: WATER.
  - b. Plug: Pentagonal.

- 6. Stationary Rod: none

## 2.4 MATERIALS

- A. Bedding and Cover:
- B. Bedding: Fill Type A5 as specified in Section 310516 - Aggregates for Earthwork.
- C. Cover: Fill Type A5 as specified in Section 310516 - Aggregates for Earthwork.
- D. Soil Backfill from Above Pipe to Finish Grade:
  - 1. Soil Type S2 as specified in Section 310513 - Soils for Earthwork.
  - 2. Subsoil: No rocks greater than 6 inches in diameter, frozen earth, or foreign matter.

## 2.5 ACCESSORIES

- A. Tracer Wire: As specified in Section 330597 - Identification and Signage for Utilities.
- B. Thrust Restraints: As specified in Section 330509.33 - Thrust Restraint for Utility Piping.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation examination.

### 3.2 PREPARATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation preparation.
- B. Cut pipe ends square, ream pipe and tube ends to full pipe diameter, and remove burrs.
- C. Remove scale and dirt from inside and outside of piping before assembly.
- D. Prepare pipe connections to equipment with flanges or unions.

### 3.3 INSTALLATION

- A. Corporation Stop Assemblies:
  - 1. Make connection for each different kind of water main, using suitable materials, equipment, and methods as approved by Engineer.

2. Provide service clamps for mains constructed of materials other than cast iron or ductile iron.
3. Location:
  - a. Screw corporation stops directly into tapped and threaded iron main at 10- and 2-o'clock positions along main's circumference.
  - b. Locate and stagger corporation stops at least 12 inches apart longitudinally.
4. Plastic Pipe Mains:
  - a. Provide full support for service clamp for full circumference of pipe, with minimum 2-inch width of bearing area.
  - b. Exercise care against crushing or causing other damage to mains at time of tapping or installation of service clamp or corporation stop.
5. Use seals or other devices such that no leaks are present in mains at points of tapping.
6. Do not backfill and cover service connections until installation has been approved by Engineer.

B. Bedding:

1. Excavate pipe trench as specified in Section 312316.13 - Trenching.
2. Placement:
  - a. Place bedding material as indicated on Drawings.
  - b. Level fill materials in one continuous layer not exceeding 6 inches of compacted depth.
  - c. Compact to 90 percent maximum density.
3. Backfill around sides and to top of pipe with cover fill, tamp in place, and compact to 90 percent maximum density.

C. Pipe and Fittings:

1. Water mains shall be laid at least 10 feet horizontally from any existing or proposed gravity sanitary or storm sewer, septic tank, or subsoil treatment system. The distance shall be measured outside edge to outside edge.
2. Install pipe to allow for expansion and contraction without stressing pipe or joints.
3. Install access fittings to permit disinfection of water system.
4. Thrust Restraints: Form and place concrete for thrust restraints at each elbow or change of direction of pipe.
5. Establish elevations of buried piping with not less than 7.5 feet of cover.
6. Tracer Wire: As specified in Section 330597 - Identification and Signage for Utilities.

D. Backfilling:

1. Backfill around sides and to top of pipe with cover fill in minimum lifts of 6 inches, tamp in place, and compact to 90 percent of Standard Proctor (ASTM 698) maximum dry density.
2. Place and compact material immediately adjacent to pipes to avoid damage to pipe and prevent pipe misalignment.
3. Maintain moisture content of bedding material to attain required relative compaction.
4. Backfilling: Backfill above pipe as specified in Section 312316.13 - Trenching.

E. Curb Stop Assemblies:

1. Set curb stops on solid bearing.

2. Boxes:
  - a. Center and plumb curb boxes over curb stops.
  - b. Set box cover flush with finished grade.

F. Service Connections:

1. Install water service according as indicated on Drawings.

G. Disinfection of Water Piping System: Flush and disinfect system as specified in Section 330110.58 - Disinfection of Water Utility Piping Systems.

### 3.4 TOLERANCES

- A. Install pipe to indicated elevation to within tolerance of 5/8 inch.

### 3.5 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Requirements for inspecting and testing.

B. Testing:

1. Pressure Testing: As specified in Section 330505.31 – Hydrostatic Testing

C. Compaction Testing:

1. Comply with ASTM D698 and ASTM D6938.
2. Testing Frequency: one test per service trench.
3. If tests indicate Work does not meet specified requirements, remove Work, replace, and retest.

END OF SECTION 331417



## SECTION 331419 - VALVES AND HYDRANTS FOR WATER UTILITY SERVICE

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Valves.
2. Valve boxes.
3. Fire hydrants.

##### B. Related Requirements:

1. Section 310516 - Aggregates for Earthwork: Drainage Aggregate.
2. Section 330110.58 - Disinfection of Water Utility Piping Systems: Requirements for flushing and disinfecting.
3. Section 330509.33 - Thrust Restraint for Utility Piping: Thrust restraints as required by this Section.
4. Section 331413 - Public Water Utility Distribution Piping: Pressure testing of valves and hydrants.
5. Section 331417 - Site Water Service Utility Laterals: Piping, trenching, backfilling, and compaction requirements.

#### 1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

##### A. Section 012000 - Price and Payment Procedures: Contract Sum/Price modification procedures.

##### B. Valves:

1. Basis of Measurement: By each.
2. Basis of Payment: Includes excavation, valve, valve box, accessories, bedding, and backfill.

##### C. Adjustment of Existing Valves:

1. Basis of Measurement: By each.
2. Basis of Payment: Includes excavation, labor, equipment, and materials to properly adjust valve box to finished grade.

##### D. Fire Hydrants:

1. Basis of Measurement: By each.
2. Basis of Payment: Includes excavation, hydrant, top extension (where required), accessories, foundation bedding, and backfill.

##### E. Hydrant Barrel Extension:

1. Basis of Measurement: by each.

2. Basis of Payment: Includes removal of hydrant, installation of barrel extension, re-installation of hydrant and tracer wires, accessories, testing and backfill.

### 1.3 REFERENCE STANDARDS

#### A. American Water Works Association:

1. AWWA C500 - Metal-Seated Gate Valves for Water Supply Service.
2. AWWA C502 - Dry-Barrel Fire Hydrants.
3. AWWA C503 - Wet-Barrel Fire Hydrants.
4. AWWA C515 - Resilient-Seated Gate Valves for Water Supply Service.
5. AWWA C550 - Protective Interior Coatings for Valves and Hydrants.

#### B. National Fire Protection Association:

1. NFPA 291 - Recommended Practice for Fire Flow Testing and Marking of Hydrants.

#### C. NSF International:

1. NSF 61 - Drinking Water System Components - Health Effects.
2. NSF 372 - Drinking Water System Components - Lead Content.

### 1.4 COORDINATION

#### A. Section 013000 - Administrative Requirements: Requirements for coordination.

#### B. Coordinate Work of this Section with installation of water mains.

### 1.5 SUBMITTALS

#### A. Section 013300 - Submittal Procedures: Requirements for submittals.

#### B. Product Data: Submit manufacturer information regarding component materials, fittings, assembly and parts diagram, and accessories.

#### C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

#### D. Manufacturer Instructions: Submit detailed instructions on installation requirements, including storage and handling procedures.

#### E. Qualifications Statements:

1. Submit qualifications for manufacturer and installer.
2. Submit manufacturer's approval of installer.

### 1.6 CLOSEOUT SUBMITTALS

#### A. Section 017000 - Execution and Closeout Requirements: Requirements for submittals.

## 1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Section 017000 - Execution and Closeout Requirements: Requirements for maintenance materials.

## 1.8 QUALITY ASSURANCE

- A. Materials in Contact with Potable Water: Certified according to NSF 61 and NSF 372.
- B. Cast manufacturer's name, pressure rating, and year of fabrication into valve body.
- C. Perform Work according to North Dakota Department of Health standards.

## 1.9 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three years' documented experience.

## 1.10 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Delivery:
  - 1. Seal valve and hydrant ends to prevent entry of foreign matter.
  - 2. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Store materials according to manufacturer instructions.
- D. Protection:
  - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
  - 2. Provide additional protection according to manufacturer instructions.

## PART 2 - PRODUCTS

### 2.1 VALVES

- A. Resilient-Wedge Gate Valves:
  - 1. Manufacturers:
    - a. American Cast Iron Pipe Company (American Flow Control & Waterous)  
1501 31st Ave. North  
Birmingham, AL 35202

- b. Clow Valve Company  
902 South Second St.  
Oskaloosa IA 52577
  - c. Mueller Co.  
633 Chestnut Street  
Suite 1200  
Chattanooga TN 37450
  - d. Substitutions: As specified in Section 016000 - Product Requirements.
  - e. or equal.
- 2. Description:
  - a. Comply with AWWA C515.
  - b. Body: Ductile iron.
  - c. Seats: Resilient.
  - d. Stem:
    - 1) Type: Non-rising.
    - 2) Material: Bronze.
  - e. Operation:
    - 1) Square operating nut.
    - 2) Opening Direction: Counterclockwise.
- 3. End Connections:
  - a. Push-on Joint
  - b. Alpha, where indicated on the drawings
- 4. Coatings:
  - a. Comply with AWWA C550.
  - b. Interior and exterior.
- 5. Pressure Rating:
  - a. 12-inch Diameter and Smaller: 200 psig.
  - b. 16-inch Diameter and Larger: 150 psig.
- 6. Exterior Bolts and Nuts: 304 Stainless Steel.

## 2.2 FIRE HYDRANTS

### A. Manufacturers:

- 1. American Cast Iron Pipe Company (American Flow Control & Waterous)  
1501 31st Ave. North  
Birmingham, AL 35202

### B. Models:

- 1. Waterous Pacer, WB-67.

### C. Dry-Barrel, Breakaway Type:

- 1. Comply with AWWA C502.
- 2. Body: Cast iron or ductile iron.
- 3. Valve: Compression type.
- 4. Burial Depth: As indicated on Drawings.
- 5. Inlet Connection Size: 6 inches.

6. Valve Opening: 5-1/4 inches in diameter.
7. End Connections:
  - a. Push-on Joint
  - b. Alpha, where indicated on the drawings
8. Bolts and Nuts: 304 Stainless steel.
9. Interior Coating: Comply with AWWA C550.
10. Opening Direction: Counterclockwise unless otherwise indicated.

D. Hose Connections:

1. One pumper, National Standard Thread 40524.
2. Two hose nozzles, National Standard Thread 7532.
3. Attach nozzle caps by separate chains.

E. Maintenance and other features:

1. Valve seat, and all operating parts, shall be removable as a single unit through the barrel, without digging.
2. Main valve shall close with the water pressure, leaving no pressure on lower joint and flange when shut off.
3. Stuffing box shall be of conventional "O" ring type, should be fully accessible and sealed from water, moisture and foreign matter.
4. Valve rod or operating nut shall be brass or brass bushed where it passes through packing.
5. The drain should be positively actuated by the valve rod when opening or closing. Drain should not depend upon gravity when opening and closing.
6. Drain weep holes shall be plugged with brass screws if the water table is above the bottom of the hydrant.
7. Hydrant design shall allow for installation of a barrel top extension.
8. Utilize stainless steel bolts on bottom flange.
9. Wrap all portions of hydrant below finished grade with 8 mil polyethylene plastic.
10. Darley hydrant flag or equal, as shown on the Drawings.

F. Finishes:

1. Primer and two coats of enamel as recommended by manufacturer.
2. Color: Red.

## 2.3 VALVE BOXES

A. Manufacturers:

1. Tyler Union  
11910 CR 492  
Tyler, TX 75706
2. Substitutions: As specified in Section 016000 - Product Requirements.
3. or equal.

B. Description:

1. 12-inch Diameter Valves and Smaller:
  - a. Material: Cast iron.
  - b. Type: Two piece; screw.
  - c. Model: Tyler Union 6850 Series
2. Valves Larger than 12-inch Diameter:
  - a. Material: Cast iron.
  - b. Type: Three piece; screw.
  - c. Base: Round.
  - d. Model: Tyler Union 6860 Series
3. Lid Inscription: WATER.

## 2.4 ACCESSORIES

- A. Thrust Restraints: As specified in Section 330509.33 - Thrust Restraint for Utility Piping.
- B. Valve Box Aligner: High-strength plastic device designed to automatically center valve box base and to prevent it from shifting off center during backfilling.
  1. Manufacturers:
    - a. Adaptor Inc.  
2151 S. 54th Street  
West Allis, WI 53219
    - b. or equal.
- C. Fire Hydrant Drainage Gravel: As specified in Section 310516 - Aggregates for Earthwork.
- D. Exterior Bolts and Nuts: 304 Stainless Steel.
- E. Barrel Extension: Standpipe and road extension kit manufactured or approved by the hydrant manufacturer. Length as shown on the Drawings or as directed by the Engineer.

## 2.5 SOURCE QUALITY CONTROL

- A. Provide shop inspection and testing of completed assembly.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation examination.
- B. Determine exact location and size of valves from Drawings.
- C. Identify required lines, levels, contours, and datum locations.
- D. Verify that elevations of existing facilities prior to excavation and installation of valves and hydrants are as indicated on Drawings.

### 3.2 PREPARATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation preparation.
- B. Locate, identify, and protect from damage utilities to remain.
- C. Do not interrupt existing utilities without permission and without making arrangements to provide temporary utility services.
  - 1. Notify Engineer not less than 48 hours in advance of proposed utility interruption.
  - 2. Do not proceed without written permission from Engineer.

### 3.3 INSTALLATION

- A. Perform trench excavation, backfilling, and compaction as specified in Section 331413 - Public Water Utility Distribution Piping.
- B. Install valves and hydrants in conjunction with pipe laying.
- C. Provide buried valves with valve boxes installed flush with finished grade.
- D. Provide support blocking and drainage gravel while installing fire hydrants; do not block drain hole.
- E. Orientation:
  - 1. Set valves and hydrants plumb.
  - 2. Set fire hydrants with pumper nozzle facing roadway.
  - 3. Set fire hydrants with centerline of pumper nozzle 24 inches above finished grade and with safety flange not more than 6 inches nor less than 2 inches above grade.
- F. After main-line pressure testing, flush fire hydrants and check for proper drainage.
- G. Disinfection of Water Piping System: Flush and disinfect valves and hydrants with water mains as specified in Section 330110.58 - Disinfection of Water Utility Piping Systems.

### 3.4 ADJUSTMENTS OF EXISTING VALVE BOXES

- A. Adjustments of existing valve box shall involve raising or lowering the lid of the valve box to the new finished surface.
- B. It shall involve some or all of the following:
  - 1. Spin/twist/rotate the box up or down.
  - 2. Install riser ring.

### 3.5 RISER RINGS

- A. Install riser ring below lid in asphalt paving areas:
  - 1. On all new valve boxes.
  - 2. On all existing valve boxes being adjusted.
- B. Clean riser ring mounting area with wire brush.
- C. Install ¼" bead of adhesive at 360 degrees.
- D. Do not allow traffic on riser rings for a minimum of 8 hours after adhesive application.

### 3.6 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Requirements for inspecting and testing.
- B. Testing: Pressure test valves and hydrants with water mains as specified in Section 330505.31 – Hydrostatic Testing.

END OF SECTION 331419



## SECTION 333111 - PUBLIC SANITARY SEWERAGE GRAVITY PIPING

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Sanitary sewerage piping.
2. Connection to existing manholes.
3. Wye branches and tees.
4. Sanitary laterals.
5. Bedding and cover materials.

##### B. Related Requirements:

1. Section 310513 - Soils for Earthwork: Soils for backfill in trenches.
2. Section 310516 - Aggregates for Earthwork: Aggregate for backfill in trenches.
3. Section 312316.13 - Trenching: Execution requirements for trenching required by this Section.
4. Section 330130.11-Television Inspection of Sewers
5. Section 330505.41 - Air Testing: Low Pressure air testing of gravity sewer piping.
6. Section 330505.43 - Mandrel Testing: Deflection testing of plastic sewerage piping.
7. Section 330561 - Concrete Manholes: Manholes for sanitary sewerage piping.
8. Section 330597 - Identification and Signage for Utilities: Trace Wire.

#### 1.2 DEFINITIONS

- A. Bedding: Fill placed under, beside, and directly over pipe, prior to subsequent backfill operations.

#### 1.3 UNIT PRICE - MEASUREMENT AND PAYMENT

- A. Section 012000 - Price and Payment Procedures: Contract Sum/Price modification procedures.

##### B. Pipe and Fittings:

1. Basis of Measurement: By linear foot.
2. Basis of Payment: Includes hand trimming, excavation, bedding, pipe and fittings, bypass pumping (if required), television inspection, trace wire system, and to indicated depth.

##### C. Cleanout:

1. Basis of Measurements: By each.
2. Basis of Payment: Includes hand trimming, excavating, reinforced concrete pad, casting, unit installation with accessories, connection to sewer piping and backfilling.

D. Sanitary Sewer Televising Riser:

1. Basis of Measurements: By each.
2. Basis of Payment: Includes the fitting on the main and all pipe, couplings, and fittings above the main.

E. Sanitary Sewer Service Connection:

1. Basis of Measurements: By each.
2. Basis of Payment: Includes labor, excavation, backfilling, materials, and equipment necessary for furnishing and installing one (1) in-line sanitary sewer service connection as shown in the plans. Pipe shall be measured as indicated above.

#### 1.4 REFERENCE STANDARDS

A. ASTM International:

1. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>).
2. ASTM D1785 - Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120.
3. ASTM D2321 - Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications.
4. ASTM D2466 - Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40.
5. ASTM D2729 - Standard Specification for Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
6. ASTM D3034 - Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
7. ASTM D6938 - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).
8. ASTM F477 - Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe.

#### 1.5 COORDINATION

- A. Section 013000 - Administrative Requirements: Requirements for coordination.
- B. Coordinate Work of this Section with Owner.

#### 1.6 SUBMITTALS

- A. Section 013300 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit manufacturer catalog cuts and other information indicating proposed materials, accessories, details, and construction information.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

- D. Source Quality-Control Submittals: Indicate results of factory tests and inspections.
- E. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.

#### 1.7 CLOSEOUT SUBMITTALS

- A. Section 017000 - Execution and Closeout Requirements: Requirements for submittals.

#### 1.8 QUALITY ASSURANCE

- A. Perform Work according to North Dakota Department of Health standards.

#### 1.9 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three years' documented experience.

#### 1.10 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Storage:
  - 1. Store materials according to manufacturer instructions.
  - 2. Store valves in shipping containers with labeling in place.
- D. Protection:
  - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
  - 2. Block individual and stockpiled pipe lengths to prevent moving.
  - 3. Provide additional protection according to manufacturer instructions.

#### 1.11 EXISTING CONDITIONS

- A. Field Measurements:
  - 1. Verify field measurements prior to fabrication.
  - 2. Indicate field measurements on Shop Drawings.

## PART 2 - PRODUCTS

### 2.1 SANITARY SEWERAGE PIPING

#### A. Plastic Pipe:

1. Material: PVC.
2. Comply with ASTM D3034:
  - a. Mains: SDR-35 or SDR-26
  - b. Service Lines: SDR-26
3. Inside Nominal Diameter:
  - a. Mains: as notes on plans
  - b. Service Lines: 6 inch.
4. End Connections: Bell-and-spigot style, with rubber-ring-sealed gasket joint.
5. Fittings: PVC.
6. Joints:
  - a. Elastomeric gaskets.
  - b. Comply with ASTM F477.

### 2.2 MANHOLES

- #### A. As specified in Section 330561 - Concrete Manholes.

### 2.3 FLEXIBLE COUPLINGS

#### A. Manufacturers:

1. Reinforced Flexible Coupling: Strong Back RC Series by Fernco.
2. Substitutions: As specified in Section 016000 - Product Requirements
3. or equal.

### 2.4 MATERIALS

#### A. Bedding and Cover:

1. Bedding and Cover: Fill Type A5, as specified in Section 310516 - Aggregates for Earthwork.
2. Soil Backfill from Above Pipe to Finish Grade:
  - a. Soil Type S2, as specified in Section 310513 - Soils for Earthwork.
  - b. Subsoil with no rocks more than 6 inches in diameter, frozen earth, or foreign matter.

### 2.5 ACCESSORIES

- #### A. Trace Wire: As specified in Section 330597 - Identification and Signage for Utilities.
- #### B. Cleanout Lids: Neenah R-1973 and labeled for sewer.

## 2.6 SOURCE QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Requirements for testing, inspection, and analysis.
- B. Provide shop inspection and testing of pipe.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation examination.
- B. Verify that trench cut is ready to receive Work of this Section.
- C. Verify that excavations, dimensions, and elevations are as indicated on Drawings.

### 3.2 PREPARATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation preparation.
- B. Prepare and implement temporary bypass pumping plan on work involving live sewers. Plan shall be approved by Engineer.
- C. Correct over-excavation with Coarse Aggregate Type A5.
- D. Remove large stones or other hard materials that could damage pipe or impede consistent backfilling or compaction.
- E. Protect and support existing sewer lines, utilities, and appurtenances.
- F. Utilities:
  - 1. Maintain profiles of utilities.
  - 2. Coordinate with other utilities to eliminate interference.
  - 3. Notify Engineer if crossing conflicts occur.

### 3.3 INSTALLATION

- A. Bedding:
  - 1. Excavate pipe trench as specified in Section 312316.13 - Trenching.
  - 2. Excavate to lines and grades as indicated on Drawings.
  - 3. Dewater excavations to maintain dry conditions and to preserve final grades at bottom of excavation.
  - 4. Provide sheeting and shoring as specified in Section 312316.13 - Trenching.
  - 5. Placement:

- a. Place bedding material at trench bottom.
- b. Level materials in continuous layer not exceeding 6-inch compacted depth.
- c. Compact to 90 percent of Standard Proctor (ASTM 698) maximum dry density.

**B. Piping:**

1. Install pipe, fittings, and accessories according to ASTM D2321, and seal joints watertight.
2. Lay pipe to slope gradients as indicated on Drawings.
3. Begin at downstream end of system and progress upstream.
4. Bedding: As indicated on Drawings.
5. Lay bell-and-spigot pipe with bells upstream.
6. Backfill and compact as specified in Section 312316.13 - Trenching.
7. Do not displace or damage pipe when compacting.
8. Connect pipe to existing sewer system with solid sleeve coupling.
9. Trace Wire: As specified in Section 330597 - Identification and Signage for Utilities.
10. Installation Standards: Install Work according North Dakota Department of Health standards.
11. Sewers shall be laid at least 10 feet horizontally from any existing or proposed water main. The distance shall be measured edge to edge.
12. Crossings:
  - a. Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade.

**C. Manholes: As specified in Section 330561 - Concrete Manholes.**

**D. Connections to Existing Manholes:**

1. Drilling:
  - a. Core drill existing manhole to clean opening.
  - b. Use of pneumatic hammers, chipping guns, and sledge hammers are not permitted.
2. Install watertight neoprene gasket and seal with nonshrink concrete grout.
  - a. Use epoxy binder between new and existing concrete.
3. Prevent construction debris from entering existing sewer line when making connection.

**E. Wye Branches and Tees:**

1. Concurrent with pipe-laying operations, install wye branches and pipe tees at locations indicated on Drawings.
2. Use standard fittings of same material and joint type as sewer main.
3. Maintain minimum 5 foot separation distance between wye connection and manhole.
4. Use saddle wye or tee with stainless-steel clamps for taps into existing piping.
5. Mount saddles with gasket and secure with metal bands.
6. Lay out holes with template, and cut holes with mechanical cutter.

**F. Sanitary Laterals:**

1. Construct laterals from wye branch to terminal point as shown on the Drawings.
2. Where depth of main pipeline warrants, construct riser-type laterals from wye branch.
3. Minimum Depth of Cover over Piping: 8 feet.
4. Minimum Separation Distance between Laterals: 5 feet.
5. Install televising riser as shown on the Drawings.

G. Backfilling: As specified in Section –312316.13 - Trenching.

### 3.4 TOLERANCES

- A. Section 014000 - Quality Requirements: Requirements for tolerances.
- B. Maximum Variation from Indicated Slope: 1/8 inch in 10 feet.

### 3.5 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Requirements for inspecting and testing.
- B. Request inspection by Engineer prior to and immediately after placing bedding.
- C. Testing:
  1. If tests indicate that Work does not meet specified requirements, remove Work, replace, and retest.
  2. Pipe Testing:
    - a. Pressure Testing: As specified in Section 330505.41 - Air Testing.
    - b. Deflection Testing: As specified in Section 330505.43 - Mandrel Testing.
  3. Compaction Testing:
    - a. Comply with ASTM D698 and ASTM D6938.
    - b. Testing Frequency: one test along utility trenches at maximum 500 foot intervals per 2 feet of vertical lift.
    - c. If tests indicate Work does not meet specified requirements, remove Work, replace, and retest.
- D. Television Inspection:
  1. As specified in Section 330130.11 – Television Inspection of Sewers.
  2. Shall be completed on new mains and services prior to street construction.
  3. Engineer shall review television inspection recordings and reports within 7 days of receipt.
  4. Deficiencies shall be repaired by the contractor prior to street construction.

### 3.6 PROTECTION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for protecting finished Work.

- B. Protect pipe and aggregate cover from damage or displacement until backfilling operation is in progress.
- C. Cap open ends of piping during periods of Work stoppage.

END OF SECTION 333111



**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION**

**COMMERCIAL GRADE HOT MIX ASPHALT**

**PROJECT UGP-8-992(041) – PCN 22277**

**DESCRIPTION**

This work consists of supplying a Commercial Grade Hot Mix Asphalt that meets the requirements of Section 430, "Hot Mix Asphalt (HMA)", with the following revisions.

**MATERIALS**

Add the following to the end of Section 430.03 "Materials".

**F. Commercial Grade Hot Mix Asphalt.**

Provide commercial grade asphalt that meets the requirements of any of the FAA designations in Section 430.03 C, "Superpave Mix Properties".

The requirements of the following sections will not be applied to commercial grade asphalt:

- Section 430.04 B, "Engineer's Quality Assurance Plan";
- Section 430.04 C.2, "Determination of Specific Gravity"; and
- Section 430.04 E, "QC Testing".

Section 430.04 D "Mix Design" is replaced with the following requirements:

Submit a mix design that was previously approved under another Department contract. Include the project number and PCN of the previous project.

If using a stationary plant, use a mix design previously approved by the Department within the last year. Include the date that the mix design was approved.

If a previously approved mix design is not available, submit a new mix design to the Engineer at least 10 calendar days before placement of material. The Engineer will request materials to use in mix design verification before approving the mix design.

**CONSTRUCTION REQUIREMENTS**

**A. Contractor Personnel.**

Replace Section 430.04 A "Contractor Quality Control (QC)" with the following:

Provide personnel meeting the requirements of NDDOT Technical Certification Program for the following tests:

- ND T 2 – Sampling of Aggregates; and
- NDDOT 5 Sampling and Splitting Field Verification of Hot Mix Asphalt (HMA) Samples.

**B. Engineer's Acceptance Testing:**

Replace Section 430.04 M "Acceptance" with the following:

The Engineer will perform acceptance tests at the frequency shown in Table 1. At times directed by the Engineer, obtain aggregate samples from the cold feed belt according to ND T 1.

<b>Table 1</b>	
<b>Testing Frequencies</b>	
<b>Test/Assessment</b>	<b>Minimum Testing Requirements</b>
ND T 11 Materials Finer than No. 200 Sieve	1 per production day.
ND T 27 Sieve Analysis of Fine and Coarse Aggregate	1 per production day
ND T 304 Fine Aggregate Angularity	1 per production day
ND T 166 Bulk Specific Gravity of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens	1 per project
ND T 209 Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt	1 per project

The Engineer will determine the percentage of air voids when determining the maximum theoretical density. Provide mix with between 2 and 6 percent air voids, when calculated on the Maximum Density Worksheet (SFN 50289).

**METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

<b>Pay Item</b>	<b>Pay Unit</b>
Commercial Grade Asphalt	Ton

Include the cost of aggregate, asphalt cement, prime coat, and tack coat in the contract unit price for "Commercial Grade Asphalt."

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**

#### **UTILITY COORDINATION**

**UGP-8-992(041) – PCN 22277**

#### **DESCRIPTION**

This work consists of coordinating the construction schedule with third party utility companies owning facilities within the project limits, verifying the location of those facilities during construction, and resolving issues with those utilities.

The requirements in this Special Provision replace the requirements of Section 105.03, "Cooperation With Utility Owners".

#### **ATTACHMENTS**

Appendix A – Utility Coordination Table

Appendix B – Utility Exhibits

#### **DEFINITIONS**

**Conflict:** A utility in need of relocation or adjustment for the construction to proceed in that area.

**Protect in Place (PIP):** A utility that does not need relocation, but needs precautions to protect the utility during construction activities.

**Utility Encounter (UE):** A Conflict or Protect in Place situation involving an existing third party owned utility.

#### **CONTRACTOR RESPONSIBILITIES**

##### **A. Responsibilities.**

The responsibilities for utility coordination include the following:

- Conduct the preconstruction utility coordination meeting;
- Main a point of contact for all utility companies;
- Maintain a schedule for utility activities;
- Hold weekly utility meetings in addition to the weekly planning and reporting meeting and report on the utility meetings at the weekly planning and reporting meeting;
- Follow up with any utility companies that do not show up to construction meetings;
- Coordinate work efforts of the utility companies, revise work schedules and traffic control as necessary to ensure adequate cooperation between UE and construction work;
- Develop and update the utility coordination plan;
- Provide a weekly written summary for contacts and meetings to the Engineer; and
- Coordinate with all of the other parties to update the project schedule specified in Section 108.03, "Progress Schedule".

**B. Utility Coordination Plan.**

Develop a utility coordination plan with each utility company that includes the phasing and scheduling requirements for UE.

**C. Record of Utility Outage Notifications.**

Request a copy of notifications that utility companies provide to customers for service outages. Maintain copies of all notifications until the Contractor signs the final estimate.

**D. Utility Coordination Schedule.**

Create and maintain a construction schedule that includes timelines for the phasing of utility coordination work. Include information contained in the contract documents and information obtained during coordination discussions with utility owners. Written agreements between the Contractor and a utility company will govern over information contained in contract documents; however, the agreements must be signed by the NDDOT, Contractor and Utility Company to be effective. Written agreements are considered contract revisions, however they are not eligible for additional compensation or additional time unless agreed to separately by the Engineer.

The Utility Coordination Table contains information related to the utility coordination requirements at each area designated as a UE. The timelines included on the Table may be longer than shown if the Contractor requests multiple resolutions simultaneously. Adjust work schedules as required to accommodate utility resolutions.

Revisions to the construction schedule due to a utility company or companies non-conformance with agreed upon schedules or failure to reasonably coordinate work efforts with the Contractor will be considered excusable, non-compensable delays as specified in Section 108.06, "Determination of and Extensions to the Contract Time".

Failure by the Contractor to reasonably coordinate schedules with a utility company or companies for UE identified in the contract, or failure to document coordination efforts will be considered non-excusable delays as specified in Section 108.06, "Determination of and Extensions to the Contract Time".

## **CONSTRUCTION REQUIREMENTS**

**A. General.**

The vertical and horizontal utility locations shown in the plans are approximate. Plan locations should not be interpreted as exact for bidding or construction purposes.

Utility facilities shown on the plans, if any, are for reference purposes only and may not constitute an exhaustive representation of all utility facilities within the project. Notify the North Dakota One Call System (811) before starting the work, so they may locate and mark all utility facilities within the project. Receive utility locates for Department-owned, publicly-owned, and privately-owned utility facilities, whether on or off the One Call System.

Comply with Chapter 49-23 of the NDCC in determining the location of underground utilities.

**B. Utilities Identified in Plans.**

Coordinate UE work with the affected utility owners. Maintain continuous communication with the Engineer, affected subcontractors, and affected utility owners until UE will no longer affect or be affected by the Contractor.

Cooperate with utility owners in relocating and adjusting utility facilities to minimize interruption to service and duplication of work by utility owners.

The Contract documents show all known UE for the project.

If a UE identified as a Protect in Place is determined to be a Conflict during construction, the Engineer will make necessary revisions to the Contract as specified in Section 104.02, "Contract Revisions". These types of changes will be considered excusable, compensable delays as specified in Section 108.06, "Determination of and Extensions to the Contract Time".

**C. Utilities Encountered During Work.**

**1. General**

Neither of the cases discussed in this subsection relieve the Contractor of liability that may arise under provisions of the NDCC.

**2. Unidentified Utility Encounters**

The Department will bear costs associated with revisions to the work as specified in Section 104.02 B, "Differing Site Conditions" only if the Engineer determines that all of the following conditions exist:

- a UE exists that was not designated in the plans; and
- the UE is in a location that affects the prosecution of the work to construct the project as designed.

**3. Utility Encounters Created Due to Actions Performed by the Contractor**

If a new UE is created due to actions performed by the Contractor for the Contractor's convenience; the Contractor shall account for and protect the affected facilities. Before performing these actions, the Contractor shall coordinate with the utility owner. The Department will not make additional payments to the Contractor nor the utility owner for UE created in this manner and will not provide additional time to the Contractor for completing the work.

If utility companies incur costs, the Department will not participate in those costs and will not make payment to the Contractor for those costs.

**D. Utility Coordination Meetings.**

**1. Preconstruction Utility Meeting.**

Arrange the meeting with the utility owners, the Contractor and affected subcontractors, local agency representatives, and the Engineer to occur no later than two weeks after the preconstruction meeting. At the meeting, provide an agenda and a tentative construction schedule for planning UE work; after the meeting, publish minutes and distribute a copy to all meeting attendees within 48 hours of the conclusion of the meeting.

**2. Weekly Utility Coordination Meeting.**

Organize a weekly meeting to discuss utility coordination efforts with utility companies and affected subcontractors, local authorities, the Engineer and others who may have an interest in utility coordination efforts. Hold the weekly utility coordination meeting immediately before the weekly planning and reporting meeting. Publish minutes and distribute copies to all meeting attendees within 48 hours of the conclusion of the meeting.

The intent of this meeting is to disseminate information regarding ongoing and upcoming UE work and to ensure that all affected parties are collaborating and sharing information related to that work.

Provide a summary of the discussion at the weekly planning and reporting meeting.

**E. Fire Hydrants.**

Before starting work that affects a fire hydrant, coordinate with the local fire authority to determine if provisions need to be in place before starting the work. If provisions are necessary, obtain the approval of the local fire authority before beginning the work affecting the fire hydrant.

**F. Damage and Interruptions.**

If the Contractor causes damage to utility facilities, the Contractor is responsible for the costs of restoring or repairing the damaged utility facility to a condition equal to or better than the condition existing before the damage occurred. Immediately notify the utility owner of the damage or, if the owner is unknown, the One Call System. Do not conceal, attempt to conceal, or make repairs to the utility facilities until approved by the utility owner. If this damage causes interruption to utility service, continuously coordinate with the utility owner until the service is fully restored.

The Department will not pay the Contractor for the cost to restore utility facilities or repair damage to utility facilities and will consider any delays resulting from this damage to be non-excusable in accordance with Section 108.06, "Determination of and Extensions to the Contract Time."

**G. Utility Criteria.**

The Utility Coordination Table and Utility Exhibits contain specific information related to each UE location.

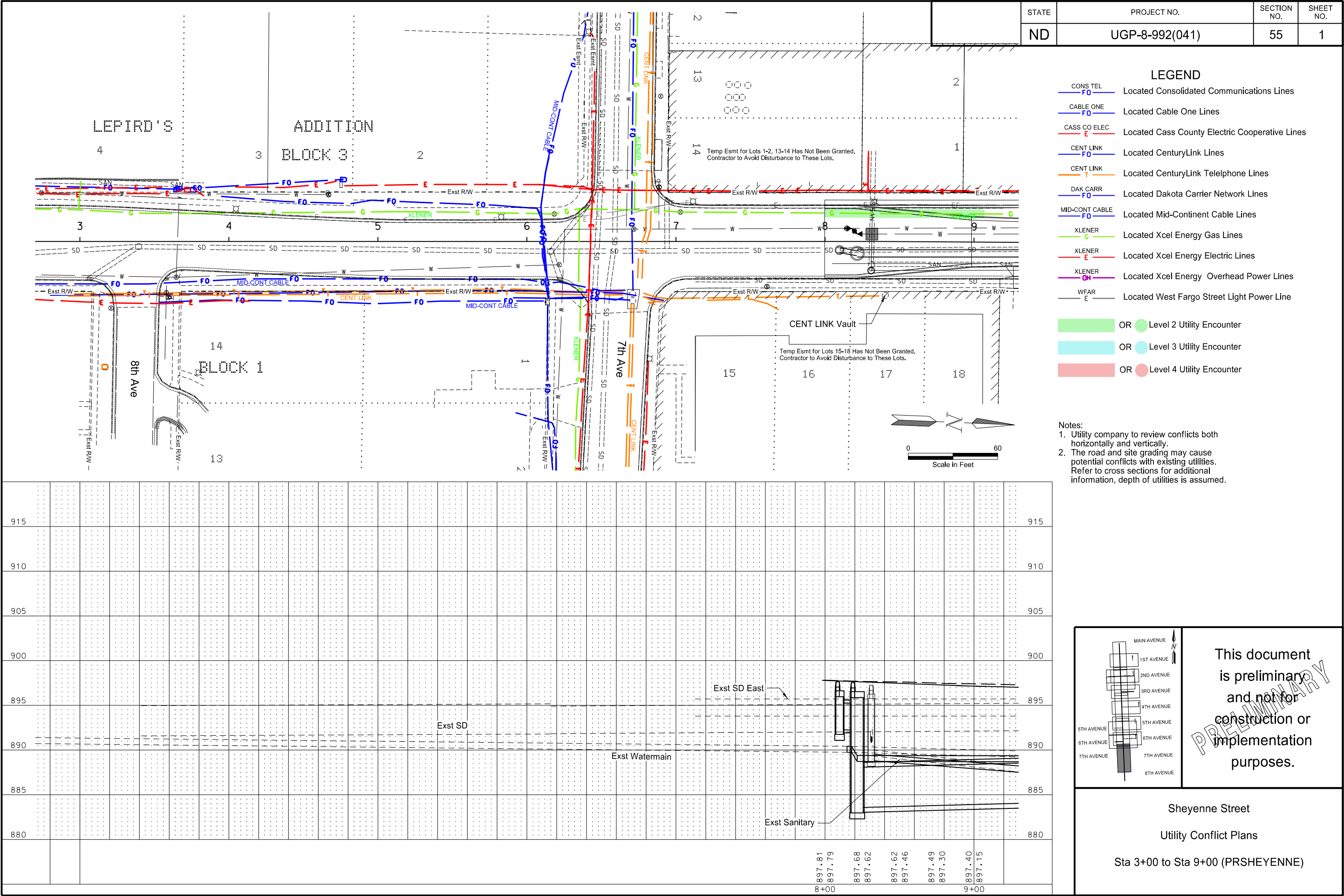
Rev. 2019-09-27

Utility Coordination Table Appendix A of SP XXXX(XX)  
UGP-8-992(041) PCN 22277  
Sorted By Station

UE ID #	Utility Coordination Exhibits	Approx. Sta From		Approx. Sta To	LT/RT or Crossing or Point Location	Roadway (Alignment/Chain)	Approx. Qty	Unit	Max Excavation Cut (-) / Fill (+) Feet	Encounter Level	Comments	Utility Company	Type of Facility	After Notification - Time For Utility to Mobilize (D = Working Day, W = Week)	Estimated Time to Complete Relocation (D = Working Day, W = Week, H = Hours)	UTILITY ENCOUNTER TYPE (UE)	
																Protect in Place	Conflict
XCEENE-1	1	8+00	to	9+07	Lt	PRSHEYENNE	107.2	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-2	2	9+53	to	10+20	Lt	PRSHEYENNE	66.3	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
CACOEC-3	2	9+64	to	10+12	Lt	PRSHEYENNE	47.7	LF		Level 2	Excavate around utility line and protect in place.	Cass County Electric	Electric Line	-	-	X	
CONCOM-4	2	9+65	to	10+23	Crossing	PRSHEYENNE	83.9	LF		Level 2	Excavate around utility line and protect in place.	Consolidated Communications	Fiber Optic Line	-	-	X	
XCEENE-5	2	10+32	to	10+33	Crossing	PRSHEYENNE	58.5	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-6	2	10+93	to	11+03	Lt	PRSHEYENNE	10.0	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-7	2	10+93	to	11+03	Lt	PRSHEYENNE	10.0	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Electric Line	-	-	X	
XCEENE-8	2	11+28	to	11+72	Lt	PRSHEYENNE	44.4	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-9	2	11+72	to	12+41	Lt	PRSHEYENNE	68.7	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-10	2	12+74	to	13+72	Lt	PRSHEYENNE	97.4	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
MIDCO-11	2	12+92	to	13+39	Lt	PRSHEYENNE	81.5	LF		Level 2	Excavate around utility line and protect in place.	Mid-Continent Cable	Fiber Optic Line	-	-	X	
MIDCO-12	2	13+39	to	13+39	Crossing	PRSHEYENNE	28.3	LF		Level 4	Relocate.	Mid-Continent Cable	Fiber Optic Line	4 Weeks	1 Day	-	X
MIDCO-13	2	12+92	to	13+39	Rt	PRSHEYENNE	18.2	LF		Level 2	Excavate around utility line and protect in place.	Mid-Continent Cable	Fiber Optic Line	-	-	X	
XCEENE-14	2	13+64	to	13+64	Crossing	PRSHEYENNE	57.0	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-15	3	17+47	to	17+47	Crossing	PRSHEYENNE	43.9	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-16	3	17+61	to	17+62	Crossing	PRSHEYENNE	77.1	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Electric Line	-	-	X	
XCEENE-17	3	18+44	to	18+44	Crossing	PRSHEYENNE	43.9	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-18	4	21+75	to		Rt	PRSHEYENNE	1.0	EA		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Junction Box	-	-	X	
XCEENE-19	4	21+78	to		Rt	PRSHEYENNE	1.0	EA		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Power Pole	-	-	X	
XCEENE-20	4	23+59	to	24+02	Crossing	PRSHEYENNE	127.6	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
CENLIN-21	4	23+59	to		Rt	PRSHEYENNE	6.4	LF		Level 3	Vertical adjustment.	CenturyLink	Fiber Optic Line	2 Weeks	2 Days		X
XCEENE-22	4	23+47	to	24+01	Lt	PRSHEYENNE	54.4	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
CONCOM-23	4	24+97	to	24+97	Crossing	PRSHEYENNE	58.9	LF		Level 2	Excavate around utility line and protect in place.	Consolidated Communications	Fiber Optic Line	-	-	X	
CONCOM-24	4	24+98	to	24+99	Crossing	PRSHEYENNE	58.9	LF		Level 2	Excavate around utility line and protect in place.	UNKNOWN	Fiber Optic Line	-	-	X	
XCEENE-25	4	25+08	to	25+61	Lt	PRSHEYENNE	52.9	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-26	4	25+10	to	25+12	Crossing	PRSHEYENNE	142.0	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-27	4	25+19	to	25+21	Crossing	PRSHEYENNE	181.0	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-28	4	26+46	to	26+47	Crossing	PRSHEYENNE	52.3	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-29	4	26+47			Rt	PRSHEYENNE	6.4	LF		Level 3	Vertical adjustment.	Xcel Energy	Gas Line				X
XCEENE-30	4-5	26+48	to	28+47	Lt	PRSHEYENNE	198.8	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-31	5	27+62	to	27+65	Crossing	PRSHEYENNE	63.7	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-32	5	28+75	to	28+85	Rt	PRSHEYENNE	14.8	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-33	5	28+75	to	28+85	Rt	PRSHEYENNE	10.0	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-34	5	28+78	to	28+78	Crossing	PRSHEYENNE	64.5	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-35	5	29+71		29+81	Lt	PRSHEYENNE	10.0	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line			X	
702COM-36	5	30+76	to	30+82	Crossing	PRSHEYENNE	38.8	LF		Level 2	Excavate around utility line and protect in place.	702 Communications	Fiber Optic Line	-	-	X	
XCEENE-37	5	30+79	to	30+79	Crossing	PRSHEYENNE	38.2	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-38	5	30+81	to		Lt	PRSHEYENNE	1.0	EA		Level 4	Relocate.	Xcel Energy	Power Pole	6 Weeks	3 Days		X
MIDCO-39	5	30+83	to	30+84	Crossing	PRSHEYENNE	37.2	LF		Level 2	Excavate around utility line and protect in place.	Mid-Continent Cable	Fiber Optic Line	-	-	X	
CONCOM-40	5	30+86	to	30+87	Crossing	PRSHEYENNE	37.0	LF		Level 2	Excavate around utility line and protect in place.	Consolidated Communications	Fiber Optic Line	-	-	X	
CONCOM-41	7	100+00	to	102+36	Rt	PR4TH	248.0	Lf		Level 2	Excavate around utility line and protect in place.	Consolidated Communications	Fiber Optic Line	-	-	X	
XCEENE-42	8	110+00	to	111+18	Lt	PR3RD	125.9	LF		Level 2	Excavate around utility line and protect in place.	Xcel Energy	Gas Line	-	-	X	
XCEENE-43	8	111+71	to		Lt	PR3RD	1.0	EA		Level 4	Relocate.	Xcel Energy	Power Pole with Transformer	6 Weeks	3 Days		X
XCEENE-44	8	111+71	to	111+71	Crossing	PR3RD	70.0	LF		Level 2	Overhead line. Protect in place.	Xcel Energy	Overhead Power	-	-	X	
XCEENE-45	9	121+23	to	121+23	Crossing	PR2ND_W	51.3	LF		Level 2	Overhead line. Protect in place.	Xcel Energy	Overhead Power	-	-	X	
Totals:																40	5

Utility Company Information			
Utility Company	Contact Name	Phone Number	Email
MIDCO	Jordan Stephens	701-850-6994	<a href="mailto:Jordan.Stephens@Midco.com">Jordan.Stephens@Midco.com</a>
Xcel Power	Travis Lill	701-241-8663	<a href="mailto:Travis.R.Lill@xcelenergy.com">Travis.R.Lill@xcelenergy.com</a>
Xcel Gas	Chadrick Walsh	701-241-8647	<a href="mailto:Chadrick.Walsh@xcelenergy.com">Chadrick.Walsh@xcelenergy.com</a>
CenturyLink	Charles Grummons	701-241-3141	<a href="mailto:Chrls.Grummons@centurylink.com">Chrls.Grummons@centurylink.com</a>
Consolidation Communications	Rob Thomas	701-356-6032	<a href="mailto:Robert.Thomas@consolidated.com">Robert.Thomas@consolidated.com</a>
702 Communications	Mike Day	218-284-5733	<a href="mailto:mday@702communications.com">mday@702communications.com</a>
Cass County Electric	Chuck Ames	701-356-4479	<a href="mailto:cames@kwh.com">cames@kwh.com</a>

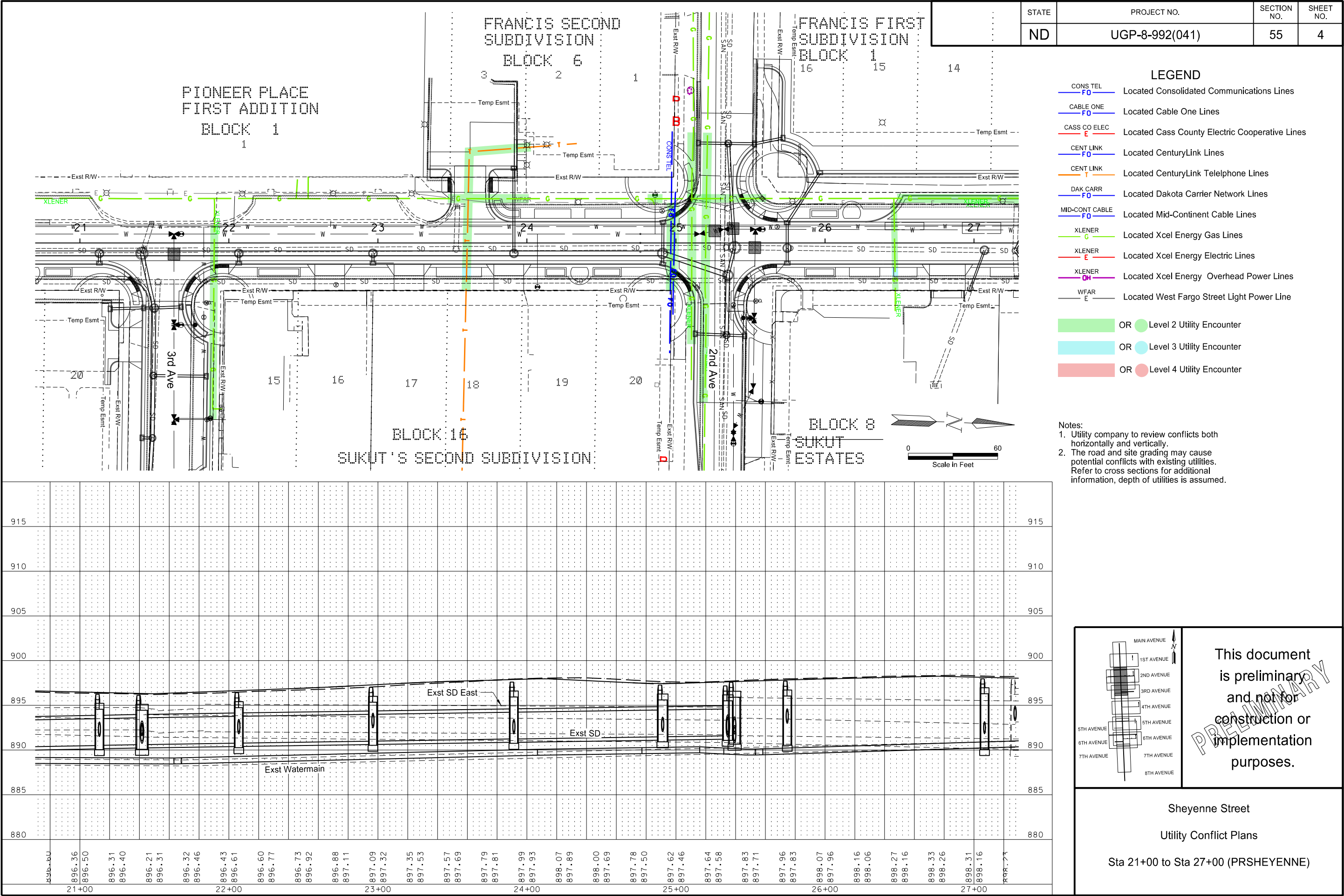
Utility Conflict Level Designations	
Level 1	Utility not exposed by proposed improvements, no impacts.
Level 2	Utility exposed by proposed improvements but no permanent impacts, contractor to protect in place and perform careful excavation.
Level 3	Utility permanently impacted by proposed improvements and requires vertical adjustment only. Horizontal location of utility will not change.
Level 4	Utility permanently impacted by proposed improvements and requires complete relocation. Vertical and horizontal location of utility will change.











Notes:

1. Utility company to review conflicts both horizontally and vertically.

2. The road and site grading may cause potential conflicts with existing utilities. Refer to cross sections for additional information, depth of utilities is assumed.

915

910

905

900

895

890

885

880

21+00

22+00

23+00

24+00

25+00

26+00

27+00

MAIN AVENUE

1ST AVENUE

2ND AVENUE

3RD AVENUE

4TH AVENUE

5TH AVENUE

6TH AVENUE

7TH AVENUE

8TH AVENUE

This document is preliminary and not for construction or implementation purposes.

Sheyenne Street

Utility Conflict Plans

Sta 21+00 to Sta 27+00 (PRSHEYENNE)

8/15/2020

11:39:29 AM

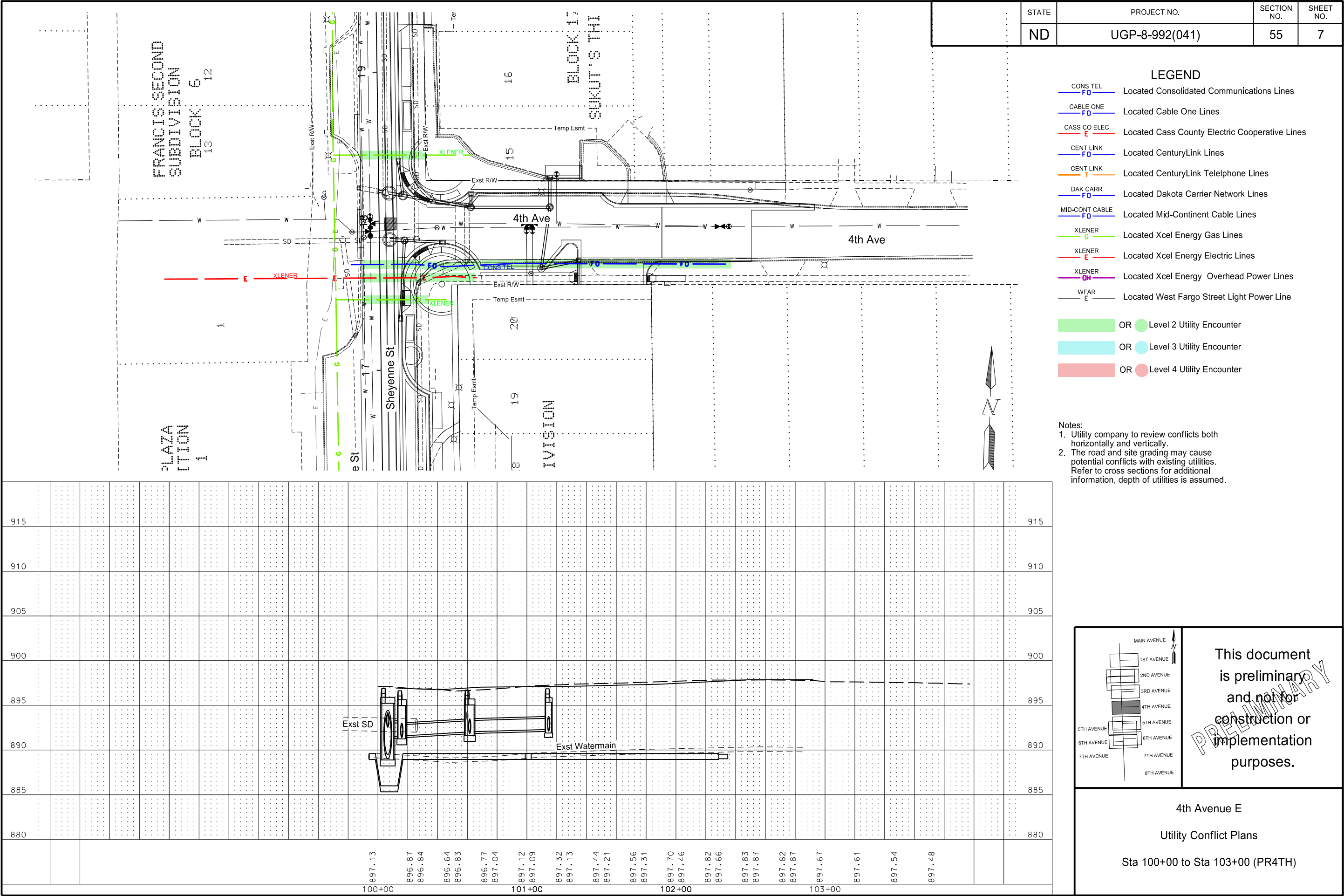
dylan.dunn

U:\PROJECTS\19924\08992.041\Design\Plan\Utility Conflicts\055\_004\_Utility Conflicts.dgn









CENT LINK

FO

Located CenturyLink Lines

CENT LINK

T

Located CenturyLink Telephone Lines

DAK CARR

FO

Located Dakota Carrier Network Lines

MID-CONT CABLE

FO

Located Mid-Continent Cable Lines

XLENER

G

Located Xcel Energy Gas Lines

XLENER

E

Located Xcel Energy Electric Lines

XLENER

OH

Located Xcel Energy Overhead Power Lines

WFAR

E

Located West Fargo Street Light Power Line

OR

Level 2 Utility Encounter

OR

Level 3 Utility Encounter

OR

Level 4 Utility Encounter

Notes:

1. Utility company to review conflicts both horizontally and vertically.

2. The road and site grading may cause potential conflicts with existing utilities. Refer to cross sections for additional information, depth of utilities is assumed.

PLAZA SECTION 1

FRANCIS SECOND SUBDIVISION BLOCK 6 12 13

4th Ave

Sheyenne St

Block 17 SUTUT'S THIR

16

15

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

915

910

905

900

895

890

885

880

100+00

101+00

102+00

103+00

897.13

896.87

896.84

896.64

896.83

896.77

897.04

897.12

897.09

897.32

897.13

897.44

897.21

897.56

897.31

897.70

897.46

897.82

897.66

897.83

897.87

897.82

897.87

897.67

897.61

897.54

897.48

MAIN AVENUE

1ST AVENUE

2ND AVENUE

3RD AVENUE

4TH AVENUE

5TH AVENUE

6TH AVENUE

7TH AVENUE

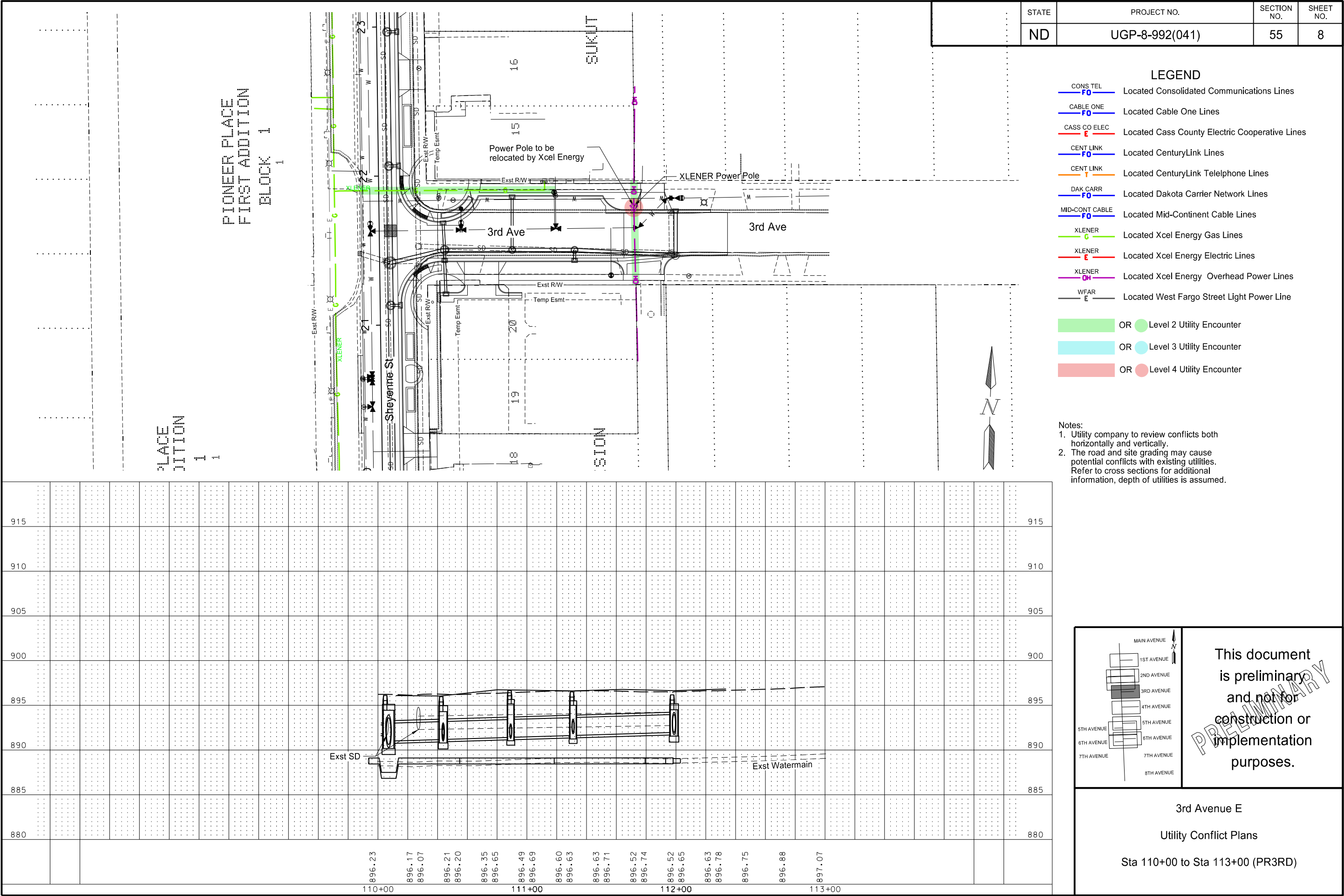
8TH AVENUE

This document is preliminary and not for construction or implementation purposes.

4th Avenue E

Utility Conflict Plans

Sta 100+00 to Sta 103+00 (PR4TH)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	UGP-8-992(041)	55	9

LEGEND

- CONS TEL

FO

Located Consolidated Communications Lines
- CABLE ONE

FO

Located Cable One Lines
- CASS CO ELEC

E

Located Cass County Electric Cooperative Lines
- CENT LINK

FO

Located CenturyLink Lines
- CENT LINK

T

Located CenturyLink Telephone Lines
- DAK CARR

FO

Located Dakota Carrier Network Lines
- MID-CONT CABLE

FO

Located Mid-Continent Cable Lines
- XLENER

G

Located Xcel Energy Gas Lines
- XLENER

E

Located Xcel Energy Electric Lines
- XLENER

OH

Located Xcel Energy Overhead Power Lines
- WFAR

E

Located West Fargo Street Light Power Line

- OR

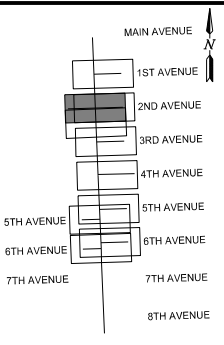
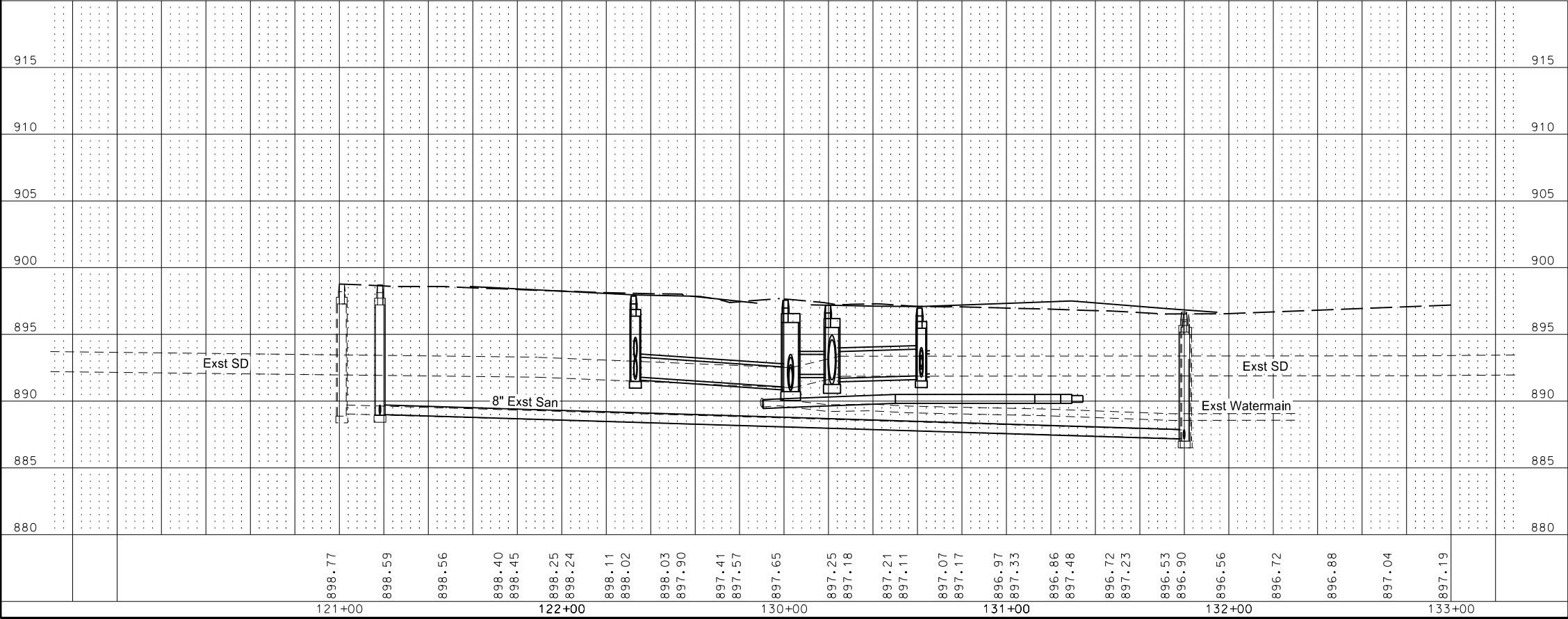
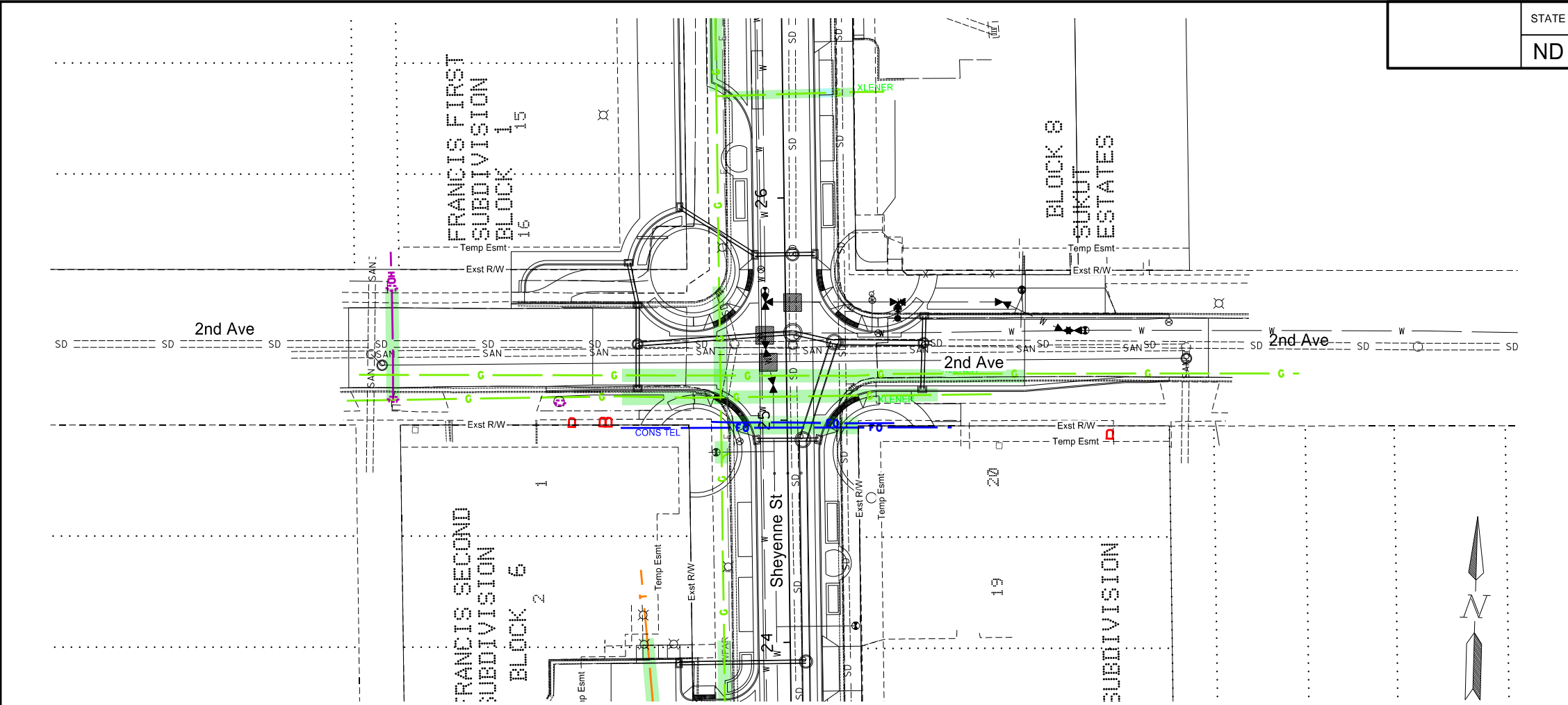
Level 2 Utility Encounter
- OR

Level 3 Utility Encounter
- OR

Level 4 Utility Encounter

- Notes:
1. Utility company to review conflicts both horizontally and vertically.

2. The road and site grading may cause potential conflicts with existing utilities. Refer to cross sections for additional information, depth of utilities is assumed.



This document is preliminary and not for construction or implementation purposes.

2nd Avenue W  
Utility Conflict Plans  
Sta 120+00 to Sta 122+00 (PR2ND\_W)



NORTH DAKOTA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION

FUEL COST ADJUSTMENT CLAUSE  
Revision Date: 9/8/2006

Introduction

This Special Provision provides for price adjustments to the Contract when significant changes in the cost of motor fuels and burner fuels occur while completing the Contract work. Participation in fuel cost adjustment program is not mandatory. A Contractor is not required to notify the Department at the time of submitting bids whether the Contractor will or will not participate in the fuel cost adjustment provision.

The North Dakota Department of Transportation (NDDOT) will send the low responsible bidder a "Fuel Cost Adjustment Affidavit" (SFN 58393) with the proposed Contract. The Contractor shall return a completed Fuel Adjustment Affidavit with the signed Contract as specified in Standard Specification Section 103.06, Execution and Approval of the Contract. The affidavit shall be returned on all Contracts with this provision even if the Contractor elects not to participate in the provision.

Compensation adjustments for motor fuels and burner fuels consumed in prosecuting the Contract shall be determined by the Engineer in accordance with the provisions set forth herein. Compensation adjustments will be assessed monthly for the cost of the motor fuels and burner fuels whenever the Current Fuel Index (CFI) is outside the given threshold of the Base Fuel Index (BFI) for the Contract.

If the Contractor has a fixed price for fuel for motor or burner fuels to complete the work, no fuel cost adjustments will be made for that fuel type. If there is no fixed fuel price for motor or burner fuels, participation in the Fuel Adjustment provision is the decision of the prime Contractor.

If the prime Contractor decides not to participate, no fuel cost adjustments will be made to the Contract for the Contractor or any subcontractors. If the prime Contractor elects to participate in the fuel cost adjustment provision, the prime Contractor shall include the anticipated fuel cost of subcontractors who wish to participate. If fuel cost adjustments are made to the Contract, the prime Contractor shall ensure that participating subcontractors including second and lower tier, are included in the adjustments in proportion to the percentage of work and anticipated fuel cost by that subcontractor.

Fuel Indexes

Each month, NDDOT will record the average wholesale price for No. 2 diesel fuel and the average wholesale price for unleaded gasoline (87 octane). The monthly average will be the average of the daily rack prices for the month as reported by DTN Energy for Fargo ND.

The burner fuel index will be the No. 2 diesel fuel index regardless of the type of burner fuel actually used.

The Base Fuel Index (BFI) price for motor fuels and burner fuel to be used in the Contract will be the average wholesale price for the month prior to the bid opening.

The Current Fuel Index (CFI) price for motor fuels and burner fuel to be used for each monthly adjustment will be the average wholesale price for the month prior to the adjustment month.

### Fuel Ratio

For motor fuels diesel and unleaded gas, the fuel ratio of the Contract will be determined by dividing the Contractor's affidavit costs for each motor fuel by the original Contract amount.

For burner fuels, the fuel ratio of the contract will be determined by dividing the Contractor's affidavit cost for burner fuels by the original Contract amount of plant-mixed hot bituminous pavement paid by the ton. Asphalt cement, binders and other miscellaneous bituminous items shall not be included.

The fuel ratio of the contract for motor and burner fuels will remain the same throughout the length of the contract. The sum of the affidavit fuel costs shall not exceed 15% of the original Contract amount.

The fuel ratio for the three fuel types will be determined by the following equation:

<b>Fuel Ratio<sub>(x, y, z)</sub> = Affidavit Cost<sub>(x, y, z)</sub> / Original Contract Amount<sub>(x, y, z)</sub></b>		
(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
Fuel Ratio <sub>(x, y, z)</sub>	=	Fuel ratio of the contract for each respective fuel type
Affidavit Cost <sub>(x, y, z)</sub>	=	Fuel costs from Fuel Adjustment Affidavit (SFN 58393)
Original Contract Amount <sub>(x, y)</sub>	=	Total of the original contract amount excluding lane rental, and Part B of the bid (when A+B bidding is used), if applicable.
Original Contract Amount <sub>(z)</sub>	=	Total original contract amount for all hot bituminous pavement bid items combined, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation.

Cost Change

The monthly change in fuel costs will be determined by the following equation:

<b>Cost Change<sub>(x, y, z)</sub> = ( CFI<sub>(x, y, z)</sub> - BFI<sub>(x, y, z)</sub> ) / BFI<sub>(x, y, z)</sub></b>		
(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel (use diesel prices)
Cost Change <sub>(x, y, z)</sub>	=	The relative change in the current CFI and the BFI for each fuel type
CFI <sub>(x, y, z)</sub>	=	Current Fuel Index for each fuel type
BFI <sub>(x, y, z)</sub>	=	Base Fuel Index for each fuel type

Contract Adjustments

Contract adjustments will be made for the cost of motor and burner fuels whenever the cost change exceeds a ±0.10 threshold. No fuel cost adjustment will be made for work done under liquidated damages. Adjustments will be determined for Motor Fuel (diesel), Motor Fuel (unleaded), and Burner Fuel (burner) separately and shall be computed on a monthly basis.

When the cost change is greater than 0.10, the rebate to the Contractor for each fuel type shall be computed according to the following formulas:

<b><math>FCA_{(x, y, z)} = \text{Fuel Ratio}_{(x, y, z)} \times \text{Estimate}_{(x, y, z)} \times (\text{Cost Change}_{(x, y, z)} - 0.10)</math></b>		
(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
$FCA_{(x, y, z)}$	=	Fuel Cost Adjustment for each of the fuel types
$\text{Fuel Ratio}_{(x, y, z)}$	=	Fuel Ratio for each of the fuel types
$\text{Estimate}_{(x, y)}$	=	The monthly total of work done on estimates issued in the current month excluding incentive or disincentive payments, pay factor adjustments and any work completed under liquidated damages.
$\text{Estimate}_{(z)}$	=	The monthly total of hot bituminous pavement work done on estimates issued in the current month, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation. Hot bituminous pavement work completed under liquidated damages will not be included.
$\text{Cost Change}_{(x, y, z)}$	=	The monthly change in fuel costs for each of the fuel types

When the cost change is less than -0.10, the credit to the Department for each fuel type shall be computed according to the following formulas:

<b><math>FCA_{(x, y, z)} = \text{Fuel Ratio}_{(x, y, z)} \times \text{Estimate}_{(x, y, z)} \times (\text{Cost Change}_{(x, y, z)} + 0.10)</math></b>		
(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
$FCA_{(x, y, z)}$	=	Fuel Cost Adjustment for each of the fuel types
$\text{Fuel Ratio}_{(x, y, z)}$	=	Fuel Ratio for each of the fuel types
$\text{Estimate}_{(x, y)}$	=	The monthly total of work done on estimates issued in the current month excluding any incentive or disincentive payments, pay factor adjustments and any work completed under liquidated damages.
$\text{Estimate}_{(z)}$	=	The monthly total of hot bituminous pavement work done on estimates issued in the current month, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation. Hot bituminous pavement work completed under liquidated damages will not be included.
$\text{Cost Change}_{(x, y, z)}$	=	The monthly change in fuel costs for each of the fuel types

### Payments

Adjustments will be determined by the Engineer monthly. Adjustments will be made under the following spec and code for each fuel type:

109 0100	Motor Fuels (Diesel)
109 0200	Motor Fuels (Unleaded)
109 0300	Burner Fuel

When significant payment adjustments are made on final estimates to account for final in-place measured quantities, the Engineer may prorate the adjustments back to the months when the work was done.

### Attachments

For informational purposes, a 'Fuel Cost Adjustment Affidavit' (SFN 58393) is included as Attachment A.

**FUEL COST ADJUSTMENT AFFIDAVIT**

North Dakota Department of Transportation, Construction Services  
SFN 58393 (8-2017)

SP Fuel Cost Adjustment Clause  
6 of 6

**Attachment A**

PCN	Project Number
The Contractor is not required to notify the Department at the time of submitting bids whether he will or will not participate in the fuel cost adjustment program. The Contractor shall return the affidavit on all Contracts with this Provision even if the Contractor elects not to participate.	
Check the box for each fuel type that has a fixed price. No adjustments in fuel price will be made for the boxes that are checked. <input type="checkbox"/> Diesel <input type="checkbox"/> Unleaded <input type="checkbox"/> Burner	
Does your company elect to participate in a fuel adjustment for this contract for the fuels that do not have a fixed price? No adjustments in fuel prices will be made if <b>No</b> is checked . <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, provide the total dollars for each of the applicable fuels:	
Diesel (D)	
Unleaded (U)	
Burner Fuel (B)	
Sum (D+U+B)	% of Original Contract Amount *
*The sum of the D, U, and B may not exceed 15% of the original contract amount.	
Under the penalty of law for perjury of falsification, the undersigned,	
Name (print or type)	Title (print or type)
Contractor (print or type)	
hereby certifies that the documentation is submitted in good faith, that the information provided is accurate and complete to the best of their knowledge and belief, and that the monetary amount identified accurately reflects the cost for fuel, and that they are duly authorized to certify the above documentation on behalf of the company.	
I hereby agree that the Department or its authorized representative shall have the right to examine and copy all Contractor records, documents, work sheets, bid sheets and other data pertinent to the justification of the fuel costs shown above.	
Signature	Date

**Acknowledgement**

State of	
County of	
Signed and sworn to (or affirmed) before me on this day _____ (month, day, year)	
Name of Notary Public or other Authorized Officer (Type or Print)	Affix Notary Stamp
Signature of Notary Public or other Authorized Officer	
Commission Expiration Date (if not listed on stamp)	

## AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

THIS AGREEMENT is by and between City of West Fargo (“Owner”) and  
\_\_\_\_ (“Contractor”).

Owner and Contractor hereby agree as follows:

## ARTICLE 1 – WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

UGP-8-992(041)  
Sheyenne St Downtown Improvements

## ARTICLE 2 – THE PROJECT

2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

## Sheyenne St Downtown Improvements

## ARTICLE 3 – ENGINEER

3.01 The Project has been designed by Moore Engineering, Inc. (Engineer). Owner assumes all duties and responsibilities, and has the rights and authority to assign an Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

## ARTICLE 4 – CONTRACT TIMES

#### 4.01 *Starting Work*

A. A Notice to Proceed will be issued to the Contractor indicating the date of commencement of Contract Times.

#### 4.02 *Contract Times: Dates*

A. The Work will be complete on or before June 15, 2022. Liquidated damages will be enforced in accordance to 2020 NDDOT Standard Specifications for Road and Bridge Construction, 108.07 for the final completion date. Liquidated damages will be assessed at a rate of \$200.00 for each calendar day that expires after June 15, 2022.

B. Liquidated Damages: Liquidated damages for failing to timely attain any completion dates are not additive and will not be imposed concurrently.

C. Parts of the Work shall be substantially completed on or before the following Interim Completion Dates:

Interim Completion Date No. 1: All Work from the south project limit at Station 7+99 to north of 4th Avenue at Station 18+48, except the curb, sidewalk, and driveways around “The Heights” (Bell Bank Downtown property) between 4th Avenue and 5th Avenue as indicated in Section 100 of the plans.

Interim Completion Date No. 1 is July 24, 2021. Liquidated damages will be assessed at a rate of \$4,000.00 for each calendar day that expires after July 24, 2021.

Interim Completion Date No. 2: All Work from north of 4th Avenue at Station 18+48 to north of 2nd Avenue at Station 25+86.

Interim Completion Date No. 2 is September 18, 2021. Liquidated damages will be assessed at a rate of \$4,000.00 for each calendar day that expires after September 18, 2021.

Interim Completion Date No. 3: All Work from north of 2nd Avenue at Station 25+86 to north project limit at Station 32+47, and curb, sidewalk, and driveways around “The Heights” (Bell Bank Downtown property) as indicated in Section 100 of the plans.

Interim Completion Date No. 3 is November 6, 2021. Liquidated damages will be assessed at a rate of \$4,000.00 for each calendar day that expires after November 6, 2021.

Final Completion: The project will be complete, including achieving Final Stabilization and the removal of all temporary erosion protection and sediment control devices.

Final Completion is June 15, 2022. Liquidated damages will be assessed at a rate of \$350.00 for each calendar day that expires after June 15, 2022.

Liquidated Damages: Liquidated damages for failing to timely attain any completion dates are not additive and will not be imposed concurrently.

## **ARTICLE 5 – CONTRACT PRICE**

5.01 The City of West Fargo shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraph 5.01.A below:

- A. For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the actual quantity of that item as indicated in the Bid Proposal. The Bid prices for Unit Price Work set forth in the bid proposal, as of the Effective Date of the Agreement are based on estimated quantities.

5.02 NDDOT payment process is outlined in NDDOT Standard Specifications for Road and Bridge Construction.

## **ARTICLE 6 – CONTRACTOR’S REPRESENTATIONS**

6.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:

- A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
- B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.



- C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
- E. Contractor has considered the information known to Contractor; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents; and (3) Contractor's safety precautions and programs.
- F. Based on the information and observations referred to in Paragraph 6.01.E above, Contractor does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

## **ARTICLE 7 – CONTRACT DOCUMENTS**

### **7.01    *Contents***

- A. The Contract Documents consist of the following:
  - 1. This Agreement (pages 1 to 6, inclusive).
  - 2. Performance bond (pages 1 to 3, inclusive).
  - 3. Payment bond (pages 1 to 3, inclusive).
  - 4. Specifications
    - a. Provided in Request for Proposal
    - b. NDDOT 2020 Edition of the Standard Specifications for Road and Bridge Construction and Supplemental Specifications
    - c. Special Provisions
  - 5. The NDDOT Request for Proposal.
  - 6. Drawings consisting of 357 sheets with each sheet bearing the following general title: UGP-8-992(041).
  - 7. Addenda (numbers 1 to    , inclusive).
  - 8. Exhibits to this Agreement (enumerated as follows):
    - a. Contractor's Bid (pages 1 to    , inclusive).

- b. Documentation submitted by Contractor prior to Notice of Award (pages \_\_\_\_ to \_\_\_\_, inclusive).
- 9. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
  - a. Notice to Proceed (pages 1 to \_\_, inclusive).
  - b. Work Change Directives.
  - c. Change Orders.
- B. The documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 7.

## **ARTICLE 8 – MISCELLANEOUS**

### **8.01   *Assignment of Contract***

- A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

### **8.02   *Successors and Assigns***

- A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

### **8.03   *Severability***

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

### **8.04   *Contractor's Certifications***

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.05:
  - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
  - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

8.05 *Other Provisions*

1. None.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement. Counterparts have been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or have been identified by Owner and Contractor or on their behalf.

This Agreement will be effective on \_\_\_\_\_ (which is the Effective Date of the Agreement).

OWNER:

CONTRACTOR

City of West Fargo

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Address for giving notices:

Address for giving notices:

City of West Fargo

800 4<sup>th</sup> Avenue East

West Fargo, ND 58078

License No.: \_\_\_\_\_

(Where applicable)

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

Agent for service of process:

## PAYMENT BOND

CONTRACTOR *(name and address):*

SURETY *(name and address of principal place of business):*

OWNER *(name and address):*

### CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description *(name and location):*

### BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract):*

Amount:

Modifications to this Bond Form: ☐ None ☐ See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

### CONTRACTOR AS PRINCIPAL

### SURETY

\_\_\_\_\_  
*(seal)*

Contractor's Name and Corporate Seal

By: \_\_\_\_\_

Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_

Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
*(seal)*

Surety's Name and Corporate Seal

By: \_\_\_\_\_

Signature *(attach power of attorney)*

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_

Signature

\_\_\_\_\_  
Title

**Notes: (1) Provide supplemental execution by any additional parties, such as joint ventures. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.**

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond shall arise after the following:
  - 5.1 Claimants who do not have a direct contract with the Contractor,
    - 5.1.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
    - 5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).
  - 5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
  - 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
  - 7.2 Pay or arrange for payment of any undisputed amounts.
  - 7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.
16. **Definitions**
- 16.1 **Claim:** A written statement by the Claimant including at a minimum:
1. The name of the Claimant;
  2. The name of the person for whom the labor was done, or materials or equipment furnished;
  3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
  4. A brief description of the labor, materials, or equipment furnished;
  5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
  6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
  7. The total amount of previous payments received by the Claimant; and
8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- 16.2 **Claimant:** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4 **Owner Default:** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.
17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.
18. Modifications to this Bond are as follows:

## PERFORMANCE BOND

CONTRACTOR *(name and address):*

SURETY *(name and address of principal place of business):*

OWNER *(name and address):*

### CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description *(name and location):*

### BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract):*

Amount:

Modifications to this Bond Form: ☐ None ☐ See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

### CONTRACTOR AS PRINCIPAL

### SURETY

\_\_\_\_\_  
Contractor's Name and Corporate Seal *(seal)*

\_\_\_\_\_  
Surety's Name and Corporate Seal *(seal)*

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Signature *(attach power of attorney)*

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_  
Signature

Attest: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

**Notes: (1) Provide supplemental execution by any additional parties, such as joint ventures. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.**



1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence,

to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### 14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims

for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows: