

STATE OF SOUTH DAKOTA  
 DEPARTMENT OF TRANSPORTATION  
 PLANS FOR PROPOSED

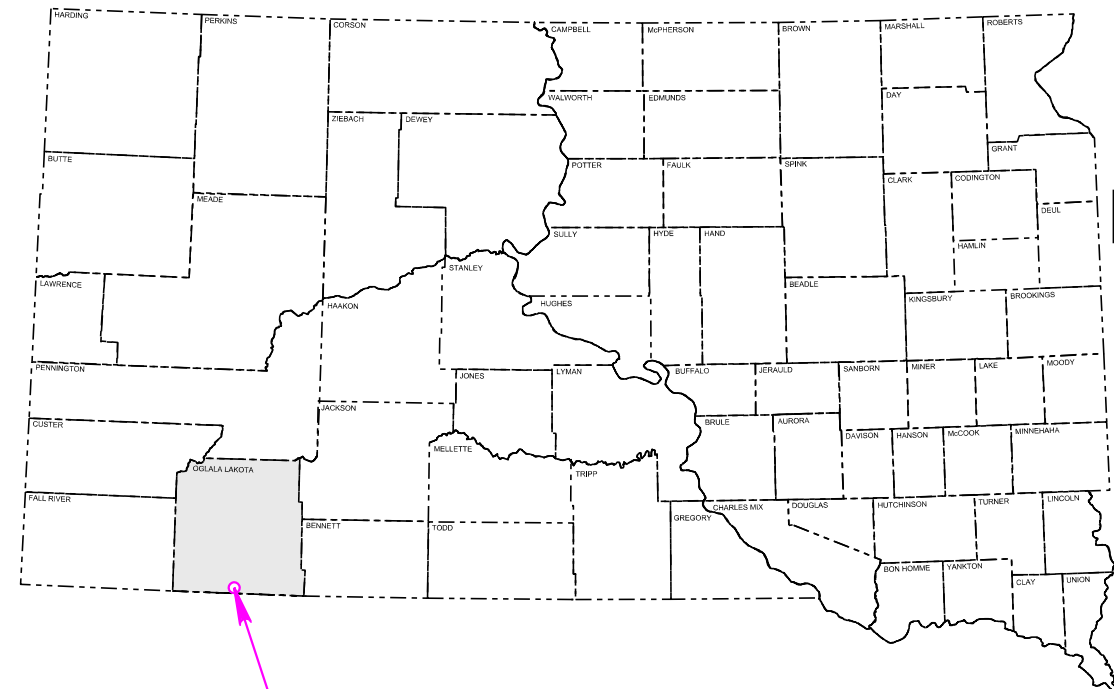
FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT NH-CR-EM 0018(195)103 P 0407(05)01	SHEET 1	TOTAL SHEETS 417
-----------------------	--	------------	---------------------

Plotting Date: 6/27/2024

INDEX OF SECTIONS

- Section A: Estimate of Quantities and Environmental Commitments
- Section B: Grading Plans
- Section C: Traffic Control Plans
- Section D: Erosion and Sediment Control Plans
- Section F: Surfacing Plans
- Section L: Signal and Lighting Plans
- Section M: Pavement Marking Plans
- Section S: Permanent Signing Plans
- Section X: Cross Sections
- Section Z: Pipe Sections



**PROJECT NH-CR-EM 0018(195)103**  
**US HIGHWAY 18**  
**PROJECT P 0407(05)01**  
**SD HIGHWAY 407**  
**OGLALA LAKOTA COUNTY**  
 URBAN GRADING, CURB & GUTTER, STORM SEWER,  
 ROADWAY LIGHTING, AC, AC & PCC SURFACING,  
 ADA UPGRADES, AND TRAFFIC SIGNAL

**PROJECT**

**END NH-CR-EM 0018(195)103**

Station 228+00.00 = Station 15+57.80  
 on BRF-NH 0018(71)103 Approximately  
 915.43 Feet South and 837.94 Feet West  
 of the Northwest corner of Section 7 -  
 Township 35 North - Range 44 West  
 MRM 103.34

**BEGIN NH-CR-EM 0018(195)103**

Station 99+00 US 18  
 Approximately 2201.00 Feet South  
 and 822.08 Feet West of the Northwest  
 corner of Section 7 - Township 35  
 North - Range 44 West

**END NH-CR-EM 0018(195)103**

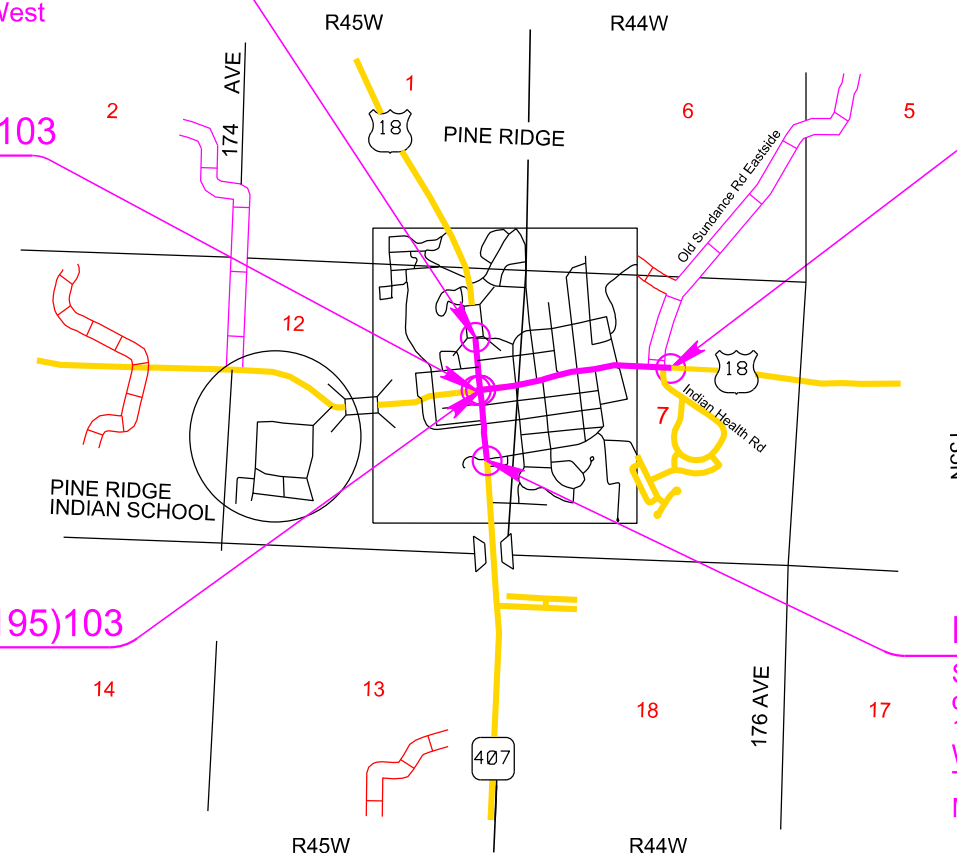
Station 136+50.00 = Station 36+13.00 on  
 NH-PH 0018(177)104 Approximately  
 1528.91 Feet South and 2290.88 Feet  
 West of the Northeast corner of Section 7 -  
 Township 35 North - Range 44 West  
 MRM = 104.00+0.289

**END P 0407(05)01 / BEGIN NH-CR-EM 0018(195)103**

Station 100+00 US 18 =  
 Station 215+19.40 SD 407  
 = Station 30+40.00 on BRF-NH 0018(71)103  
 Approximately 2192.43 Feet South  
 and 722.47 Feet West of the Northwest  
 corner of Section 7 - Township 35  
 North - Range 44 West  
 MRM 103.53+0.030 US 18  
 MRM 1.79 SD 407

**BEGIN P 0407(05)01**

Station 200+00 = Station 81+08.14  
 on HES0407(02)0 Approximately  
 1581.84 Feet North and 409.82 Feet  
 West of the Southeast corner of Section 12 -  
 Township 35 North - Range 45 West  
 MRM = 1.53



**DESIGN DESIGNATION - US 18**

ADT (2023)	7467
ADT (2043)	9939
DHV	1170
D	50.0%
T DHV	2.3%
T ADT	5.1%
V	35 mph

**DESIGN DESIGNATION - SD 407**

ADT (2023)	3860
ADT (2043)	5138
DHV	605
D	50.0%
T DHV	1.0%
T ADT	2.3%
V	25 mph

	PCN 04FC - US 18		PCN 06N3 - SD 407	
GROSS LENGTH	5030.60 FEET	0.953 MILES	1519.40 FEET	0.288 MILES
LENGTH OF EXCEPTIONS	0.00 FEET	0.000 MILES	0.00 FEET	0.000 MILES
NET LENGTH	5030.60 FEET	0.953 MILES	1519.4 FEET	0.288 MILES



Plot Scale - 1:200

brandonfried

Plotted From -

File - ...Plans\Sections\Title.dgn

# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-CR-EM 0018(195)103 P 0407(05)01	A1	A7

Rev. 8/13/2024 BAF

## Section B - Grading

## Section B - Grading (Cont.)

## Section B - Grading (Cont.)

### PCN 04FC

### PCN 04FC

### PCN 04FC

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3220	Reestablish Right-of-Way and Property Corner	139	Each
009E3230	Grade Staking	2,753	Mile
009E3240	Graded Centerline Staking	1,199	Mile
009E3245	Final Cross Section Survey	1,199	Mile
009E3250	Miscellaneous Staking	1,199	Mile
009E3280	Slope Staking	1,199	Mile
009E3290	Structure Staking	7	Each
009E3301	Engineer Directed Surveying/Staking	100.0	Hour
009E4300	Construction Schedule, Category III	Lump Sum	LS
100E0020	Clear and Grub Tree	9	Each
100E0100	Clearing	Lump Sum	LS
110E0300	Remove Concrete Curb and/or Gutter	4,197	Ft
110E0600	Remove Fence	1,976	Ft
110E1010	Remove Asphalt Concrete Pavement	24,656.8	SqYd
110E1100	Remove Concrete Pavement	3,843.4	SqYd
110E1140	Remove Concrete Sidewalk	5,055.7	SqYd
110E7040	Remove Gate for Reset	2	Each
110E7510	Remove Pipe End Section for Reset	1	Each
120E0010	Unclassified Excavation	38,264	CuYd
120E0600	Contractor Furnished Borrow	7,652	CuYd
120E0900	Contaminated Material Excavation	100	CuYd
120E1000	Muck Excavation	898	CuYd
120E2000	Undercutting	19,418	CuYd
120E6100	Water for Embankment	71.0	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
270E0020	Salvage and Stockpile Asphalt Mix Material	7,219.0	Ton
270E0110	Salvage and Stockpile Granular Material	10,352.0	Ton
380E2566	6" Barrier Type Colored Median PCC Pavement	22.0	SqYd
380E2900	6" Raised Concrete Island with Pedestrian Access	38.5	SqYd
380E3520	6" PCC Approach Pavement	695.0	SqYd
380E4050	8" PCC Fillet Section	1,132.1	SqYd
420E0300	Structure Excavation, Retaining Wall	1	CuYd
421E0100	Pipe Culvert Undercut	86	CuYd
421E1000	Footing Undercut	2	CuYd
450E0122	18" RCP Class 2, Furnish	1,210	Ft
450E0130	18" RCP, Install	1,210	Ft
450E0142	24" RCP Class 2, Furnish	272	Ft
450E0150	24" RCP, Install	272	Ft
450E0182	36" RCP Class 2, Furnish	3,180	Ft
450E0190	36" RCP, Install	3,180	Ft
450E0192	42" RCP Class 2, Furnish	130	Ft
450E0200	42" RCP, Install	130	Ft

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
450E2028	36" RCP Flared End, Furnish	2	Each
450E2029	36" RCP Flared End, Install	2	Each
450E2032	42" RCP Flared End, Furnish	2	Each
450E2033	42" RCP Flared End, Install	2	Each
450E4789	36" CMP 16 Gauge, Furnish	4	Ft
450E4790	36" CMP, Install	4	Ft
450E5421	36" CMP Safety End with Bars, Furnish	1	Each
450E5423	36" CMP Safety End, Install	1	Each
450E8023	36" CMP to RCP Transition, Furnish	1	Each
450E8025	36" Pipe Transition, Install	1	Each
* 450E8900	Cleanout Pipe Culvert	26	Each
450E9001	Reset Pipe End Section	1	Each
462E0100	Class M6 Concrete	204.4	CuYd
470E0020	Pipe Handrail	187.2	Ft
480E0100	Reinforcing Steel	35,388	Lb
480E0200	Epoxy Coated Reinforcing Steel	1,483	Lb
530E0300	Type C Concrete Retaining Wall	60	SqFt
600E0300	Type III Field Laboratory	1	Each
620E0020	Type 2 Right-of-Way Fence	172	Ft
620E1020	2 Post Panel	2	Each
620E2100	Reset Gate	2	Each
621E0050	5' Chain Link Fence with Top Rail	1,436	Ft
621E0244	Special 4' Fence	86	Ft
621E0420	Single Vehicular Swing Gate	2	Each
650E0079	Modified Type B68 Concrete Curb and Gutter	5,251	Ft
650E0080	Type B68 Concrete Curb and Gutter	1,394	Ft
650E4679	Modified Type P8 Concrete Gutter	582	Ft
650E4680	Type P8 Concrete Gutter	291	Ft
650E6080	8" Concrete Valley Gutter	129	Ft
651E0040	4" Concrete Sidewalk	42,069	SqFt
651E0160	6" Reinforced Concrete Sidewalk	5,371	SqFt
651E0540	4" Colored Concrete Sidewalk	24,009	SqFt
651E7000	Type 1 Detectable Warnings	648	SqFt
670E5340	4' x 11' Precast Concrete Type S Drop Inlet Lid	32	Each
670E5350	Special Precast Concrete Type S Drop Inlet Lid	2	Each
671E1048	48" Manhole	1	Each
671E4548	48" Manhole Cone Section	4.3	Ft
671E6008	Type A8 Manhole Frame and Lid	8	Each
671E6100	Manhole Frame & Lid, Install	8	Each
671E7010	Adjust Manhole	11	Each
700E0210	Class B Riprap	72.7	Ton
700E0310	Class C Riprap	76.0	Ton
831E0110	Type B Drainage Fabric	136	SqYd

\* - Denotes Non-Participating

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
831E0300	Reinforcement Fabric (MSE)	1,280	SqYd
900E5149	Landscaping Rock	15.0	CuYd

### PCN 06N3

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3230	Grade Staking	0.535	Mile
009E3240	Graded Centerline Staking	0.261	Mile
009E3245	Final Cross Section Survey	0.261	Mile
009E3250	Miscellaneous Staking	0.261	Mile
009E3280	Slope Staking	0.261	Mile
100E0100	Clearing	Lump Sum	LS
110E0300	Remove Concrete Curb and/or Gutter	446	Ft
110E1010	Remove Asphalt Concrete Pavement	964.4	SqYd
110E1100	Remove Concrete Pavement	165.7	SqYd
110E1140	Remove Concrete Sidewalk	929.9	SqYd
120E0010	Unclassified Excavation	718	CuYd
120E0600	Contractor Furnished Borrow Excavation	258	CuYd
120E0900	Contaminated Material Excavation	100	CuYd
120E2000	Undercutting	349	CuYd
120E6100	Water for Embankment	2.0	MGal
270E0020	Salvage and Stockpile Asphalt Mix Material	176.0	Ton
270E0110	Salvage and Stockpile Granular Material	257.0	Ton
380E3520	6" PCC Approach Pavement	104.4	SqYd
380E4050	8" PCC Fillet Section	339.2	SqYd
* 450E8900	Cleanout Pipe Culvert	16	Each
650E0079	Modified Type B68 Concrete Curb and Gutter	67	Ft
650E0080	Type B68 Concrete Curb and Gutter	533	Ft
650E4680	Type P8 Concrete Gutter	140	Ft
651E0040	4" Concrete Sidewalk	11,539	SqFt
651E0160	6" Reinforced Concrete Sidewalk	939	SqFt
651E0540	4" Colored Concrete Sidewalk	2,241	SqFt
651E7000	Type 1 Detectable Warnings	220	SqFt
671E7010	Adjust Manhole	3	Each

\* - Denotes Non-Participating

### SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications, and Special Provisions as included in the Proposal.



**Section C - Traffic Control**

**Section C - Traffic Control (Cont.)**

**Section D - Erosion and Sediment Control**

**PCN 04FC**

**PCN 06N3**

**PCN 04FC**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
004E0010	Blading	100	Hour
260E2030	Gravel Cushion, Salvaged	2,000.0	Ton
320E1200	Asphalt Concrete Composite	300.0	Ton
634E0010	Flagging	800.0	Hour
634E0110	Traffic Control Signs	1,633.8	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	70	Each
634E0330	Temporary Raised Pavement Markers	21,220	Ft
634E0380	Tubular Marker	835	Each
634E0420	Type C Advance Warning Arrow Board	2	Each
634E0525	Linear Delineation System Panel, Barrier Mounted	20	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	9,505	Ft
634E0565	Remove Pavement Marking, Arrow	16	Each
634E0600	4" Temporary Pavement Marking Tape Type I	17,460	Ft
634E0640	Temporary Pavement Marking	8,489	Ft
634E0700	Traffic Control Movable Concrete Barrier	20	Each
634E0705	Remove and Reset Traffic Control Movable Concrete Barrier	40	Each
634E0750	Temporary Concrete Barrier End Protection	4	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	4	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	1	Each
634E1002	Detour and Restriction Signing	1,062.4	SqFt
634E1020	Temporary Business Signing	126.0	SqFt
634E2000	Longitudinal Pedestrian Barricade	5,000	Ft
634E2015	Temporary Pedestrian Access Route	Lump Sum	LS
634E2020	Temporary Curb Ramp	8	Each
634E2025	Longitudinal Pedestrian Barrier	700	Ft
634E2050	Temporary Sidewalk	5,000	SqFt
634E2052	Temporary Flexible Sidewalk	5,000	SqFt
634E2054	Reset Temporary Flexible Sidewalk	5,000	SqFt
734E5010	Sweeping	150	Hour

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
260E2030	Gravel Cushion, Salvaged	550.0	Ton
320E1200	Asphalt Concrete Composite	125.0	Ton
634E0010	Flagging	300.0	Hour
634E0110	Traffic Control Signs	487.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	11	Each
634E0330	Temporary Raised Pavement Markers	1,920	Ft
634E0380	Tubular Marker	160	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	1,840	Ft
634E0565	Remove Pavement Marking, Arrow	2	Each
634E0600	4" Temporary Pavement Marking Tape Type I	1,200	Ft
634E0705	Remove and Reset Traffic Control Movable Concrete Barrier	20	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	2	Each
634E1002	Detour and Restriction Signing	254.4	SqFt
634E1020	Temporary Business Signing	84.0	SqFt
634E2000	Longitudinal Pedestrian Barricade	650	Ft
634E2020	Temporary Curb Ramp	3	Each
634E2025	Longitudinal Pedestrian Barrier	75	Ft
634E2050	Temporary Sidewalk	150	SqFt
634E2052	Temporary Flexible Sidewalk	150	SqFt
634E2054	Reset Temporary Flexible Sidewalk	150	SqFt
734E5010	Sweeping	50	Hour

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	16.4	CuYd
110E1693	Remove Erosion Control Wattle	2,760	Ft
110E1695	Remove Sediment Filter Bag	1,952	Ft
110E1700	Remove Silt Fence	461	Ft
120E6300	Water for Vegetation	350.3	MGal
230E0010	Placing Topsoil	1,948	CuYd
730E0100	Cover Crop Seeding	2.0	Bu
730E0251	Special Permanent Seed Mixture 1	1,025	Lb
730E1200	Hydroseeding	17,515	SqYd
731E0200	Fertilizing	2.70	Ton
732E0200	Fiber Mulching	5.4	Ton
734E0044	Soil Stabilizer	2.5	Acre
734E0103	Type 3 Erosion Control Blanket	11,788	SqYd
734E0154	12" Diameter Erosion Control Wattle	2,760	Ft
734E0165	Remove and Reset Erosion Control Wattle	690	Ft
734E0180	Sediment Filter Bag	1,952	Ft
734E0510	Shaping for Erosion Control Blanket	76	Ft
734E0604	High Flow Silt Fence	1,844	Ft
734E0610	Mucking Silt Fence	128	CuYd
734E0620	Repair Silt Fence	461	Ft
734E0845	Sediment Control at Inlet with Frame and Grate	31	Each
734E0847	Sediment Control at Type S Reinforced Concrete Drop Inlet	442	Ft
734E5005	Dewatering	Lump Sum	LS
734E5010	Sweeping	15	Hour
900E1320	Construction Entrance	2	Each

<b>INDEX OF SHEETS</b>	
A1 to A4	Estimate of Quantities for Sections B, C, D, F, L, M, and S
A5 to A7	Environmental Commitments

**PCN 06N3**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
120E6300	Water for Vegetation	26.5	MGal
230E0010	Placing Topsoil	147	CuYd
730E0251	Special Permanent Seed Mixture 1	78	Lb
730E1200	Hydroseeding	1,326	SqYd
731E0200	Fertilizing	0.20	Ton
732E0250	Fiber Mulching	822	Lb
734E0845	Sediment Control at Inlet with Frame and Grate	3	Each
734E5010	Sweeping	3	Hour
900E1320	Construction Entrance	1	Each



**Section F - Surfacing**

**PCN 04FC**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
120E6200	Water for Granular Material	135.3	MGal
260E1010	Base Course	350.0	Ton
260E1030	Base Course, Salvaged	1,843.1	Ton
260E2030	Gravel Cushion, Salvaged	9,092.0	Ton
270E0200	Blend, Haul, and Stockpile Granular Material	13,639.1	Ton
320E1200	Asphalt Concrete Composite	1,878.4	Ton
380E0050	8" Nonreinforced PCC Pavement	15,664.3	SqYd
380E3020	6" PCC Driveway Pavement	23.7	SqYd
380E3040	8" PCC Driveway Pavement	543.1	SqYd
380E6000	Dowel Bar	9,708	Each
380E6110	Insert Steel Bar in PCC Pavement	81	Each

**PCN 06N3**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
120E6200	Water for Granular Material	8.3	MGal
260E1010	Base Course	697.0	Ton
320E1200	Asphalt Concrete Composite	236.0	Ton

**Section L – Signal and Lighting Plans**

**PCN 04FC**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1520	Remove Signal Equipment	Lump Sum	LS
110E1530	Remove Signal Pole Footing	8	Each
110E1540	Remove Luminaire Pole Footing	19	Each
110E5100	Salvage Luminaire Pole	17	Each
110E5105	Salvage Luminaire	17	Each
110E5110	Salvage Signal Equipment	Lump Sum	LS
635E0040	Breakaway Base Luminaire Pole with Arm, 40' Mounting Height	20	Each
635E2000	Pedestal Signal Pole	2	Each
635E2025	Signal Pole with 25' Mast Arm	1	Each
635E2030	Signal Pole with 30' Mast Arm	1	Each
635E2035	Signal Pole with 35' Mast Arm	2	Each
635E2125	Signal Pole with 25' Mast Arm and Luminaire Arm	3	Each
635E2130	Signal Pole with 30' Mast Arm and Luminaire Arm	1	Each
635E2135	Signal Pole with 35' Mast Arm and Luminaire Arm	3	Each
635E2140	Signal Pole with 40' Mast Arm and Luminaire Arm	1	Each
635E3700	Roadway Luminaire, LED with Photoelectric Cell	8	Each
635E4030	3 Section Vehicle Signal Head	36	Each
635E5020	2' Diameter Footing	164.0	Ft
635E5030	3' Diameter Footing	137.0	Ft
635E5301	Type 1 Electrical Junction Box	16	Each
635E5302	Type 2 Electrical Junction Box	13	Each
635E5303	Type 3 Electrical Junction Box	3	Each
635E5400	Electrical Service Cabinet	2	Each
635E5405	Electrical Service Cabinet with Secondary Disconnect	2	Each
635E5430	Traffic Signal Controller	3	Each
635E5515	Battery Backup System for Traffic Signal	3	Each
635E5530	Preformed Detector Loop	78	Each
635E5562	Siren Emergency Vehicle Preemption System	3	Each
635E5880	Accessible Pedestrian Signal	24	Each
635E5910	Pedestrian Push Button Pole	25	Each
635E5922	Pedestrian Signal Head with Countdown Timer	24	Each
635E5930	Pedestrian Crossing Sign	24	Each
635E5980	Rectangular Rapid Flashing Beacon System	1	Each
635E7500	Remove and Reset Luminaire Pole	8	Each
635E8110	1" Rigid Conduit, Schedule 40	355	Ft
635E8120	2" Rigid Conduit, Schedule 40	5,785	Ft
635E8140	4" Rigid Conduit, Schedule 40	40	Ft
635E8220	2" Rigid Conduit, Schedule 80	1,320	Ft
635E8230	3" Rigid Conduit, Schedule 80	640	Ft
635E8240	4" Rigid Conduit, Schedule 80	220	Ft
635E9011	1/C #1 AWG Copper Wire	12,980	Ft
635E9012	1/C #2 AWG Copper Wire	6,405	Ft

**Section L – Signal and Lighting Plans (Cont.)**

**PCN 04FC**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
635E9016	1/C #6 AWG Copper Wire	5,055	Ft
635E9018	1/C #8 AWG Copper Wire	1,440	Ft
635E9024	1/C #14 AWG Copper Wire	1,600	Ft
635E9502	2/C #14 AWG Copper Tray Cable, K2	3,820	Ft
635E9504	4/C #14 AWG Copper Tray Cable, K2	1,575	Ft
635E9506	6/C #14 AWG Copper Tray Cable, K2	140	Ft
635E9525	25/C #14 AWG Copper Tray Cable, K2	1,700	Ft
635E9600	#16 AWG Copper Twisted Shielded Pair	5,695	Ft
635E9710	2/C #10 AWG Copper Pole and Bracket Cable	1,580	Ft

**Section M - Pavement Marking**

**PCN 04FC**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E0010	Cold Applied Plastic Pavement Marking, 4"	10,834	Ft
633E0020	Cold Applied Plastic Pavement Marking, 8"	190	Ft
633E0220	Preformed Thermoplastic Pavement Marking, 12"	164	Ft
633E0225	Preformed Thermoplastic Pavement Marking, 24"	1,120	Ft
633E0235	Preformed Thermoplastic Pavement Marking, Arrow	47	Each
633E1220	High Build Waterborne Pavement Marking Paint, 4" White	370	Ft
633E1222	High Build Waterborne Pavement Marking Paint, 4" Yellow	3,712	Ft
633E1252	High Build Waterborne Pavement Marking Paint, 12" Yellow	31	Ft
633E1262	High Build Waterborne Pavement Marking Paint, 24" Yellow	18	Ft
633E5000	Grooving for Cold Applied Plastic Pavement Marking, 4"	10,834	Ft
633E5005	Grooving for Cold Applied Plastic Pavement Marking, 8"	190	Ft
633E5010	Grooving for Cold Applied Plastic Pavement Marking, 12"	164	Ft
633E5015	Grooving for Cold Applied Plastic Pavement Marking, 24"	1,120	Ft
633E5025	Grooving for Cold Applied Plastic Pavement Marking, Arrow	47	Each

**PCN 06N3**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E0010	Cold Applied Plastic Pavement Marking, 4"	410	Ft
633E0225	Preformed Thermoplastic Pavement Marking, 24"	96	Ft
633E0235	Preformed Thermoplastic Pavement Marking, Arrow	2	Each
633E1222	High Build Waterborne Pavement Marking Paint, 4" Yellow	797	Ft
633E5000	Grooving for Cold Applied Plastic Pavement Marking, 4"	410	Ft
633E5015	Grooving for Cold Applied Plastic Pavement Marking, 24"	96	Ft
633E5025	Grooving for Cold Applied Plastic Pavement Marking, Arrow	2	Each



## Section S - Permanent Signing

Rev. 8/13/2024 BAF

### PCN 04FC

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E0130	Remove Traffic Sign	12	Each
110E7150	Remove Sign for Reset	26	Each
632E1320	2.0"x2.0" Perforated Tube Post	235.6	Ft
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	13.0	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	552.4	SqFt
632E3500	Reset Sign	26	Each
632E3710	Radar Speed Sign, Solar Powered	2	Each

### PCN 06N3

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E0130	Remove Traffic Sign	3	Each
110E7150	Remove Sign for Reset	6	Each
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	78.0	SqFt
632E3500	Reset Sign	6	Each
632E3710	Radar Speed Sign, Solar Powered	1	Each



**ENVIRONMENTAL COMMITMENTS**

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor's primary contact regarding matters associated with these commitments will be the Project Engineer. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT's Environmental Commitments can be accessed through the Environmental Procedures Manual found at: <<https://dot.sd.gov/media/documents/EnvironmentalProceduresManual.pdf>>

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion.

**COMMITMENT A: AQUATIC RESOURCES**

**COMMITMENT A1: WETLANDS**

All efforts to avoid and minimize wetland impacts from the project have resulted in approximately 0.09 acre of wetlands (includes temporary and permanent) becoming impacted. Refer to plans for location and boundaries of the impacted wetlands.

**Table of Impacted Wetlands**

Wetland No.	Station (PCN 04FC)	Perm. Impact Left (Acres)	Perm. Impact Right (Acres)	Temp. Impact Left (Acres)	Temp. Impact Right (Acres)	Total Impact (Acres)
1	133+70L	0.09	0.00	0.00	0.00	0.09

**Action Taken/Required:**

Mitigation is required in accordance with the "Statewide Finding Regarding Wetlands for South Dakota Federal-Aid Highway Projects (February 2018)". Replacement of 0.09 acre of permanent wetland impacts will be completed through another wetland mitigation opportunity in a manner which considers FHWA's program-wide goal of 'net gain' of wetlands through enhancement, creation, and preservation.

Temporary impacts identified in the Table of Impacted Wetlands will not be mitigated as original contours and elevations will be re-established. Prior to initiating temporary work in wetlands, the Contractor will submit a plan to the Project Engineer in accordance with Section 7.21 D of the Specifications.

The Contractor will notify the Project Engineer if additional easement is needed to complete work adjacent to any wetland. The Project Engineer will obtain an appropriate course of action from the Environmental Office before proceeding with construction activities that affect any wetlands beyond the work limits and easements shown in the plans.

**COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES**

**COMMITMENT B2: WHOOPING CRANE**

The Whooping Crane is a spring and fall migratory bird in South Dakota that is about 5 feet tall and typically stops on wetlands, rivers, and agricultural lands along their migration route. An adult Whooping Crane is white with a red crown and a long, dark, pointed bill. Immature Whooping Cranes are cinnamon brown. While in flight, their long necks are kept straight and their long dark legs trail behind. Adult Whooping Cranes' black wing tips are visible during flight.

**Action Taken/Required:**

Harassment or other measures to cause the Whooping Crane to leave the site is a violation of the Endangered Species Act. If a Whooping Crane is sighted roosting in the vicinity of the project, borrow pits, or staging areas associated with the project, cease construction activities in the affected area until the Whooping Crane departs and immediately contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

**COMMITMENT B5: NORTHERN LONG-EARED BAT**

This project is within the range of suitable habitat for the Northern Long-Eared Bat (NLEB) and project work will avoid conflicts with NLEB roosting habitat.

**Action Taken/Required:**

Project activities that include tree removal, structure work, and/or work within one-quarter mile of a known hibernacula or 150 feet of a known maternity roost tree, or suitable habitat should not occur within the location(s) listed below during the NLEB seasonal work restriction timeframe without approval from the SDDOT Environmental Office.

Station	NLEB Seasonal Work Restriction
107+25 R	April 1 to October 31
132+50 – 134+00 L	April 1 to October 31

Tree removal will occur between November 1<sup>st</sup> and March 31<sup>st</sup>.

**COMMITMENT C: WATER SOURCE**

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water (≥140 °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

**Action Taken/Required:**

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Agriculture and Natural Resources (DANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at:

< <https://sdleastwanted.sd.gov/maps/default.aspx> >

< [South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species: https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04](https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04) >

**COMMITMENT D: WATER QUALITY STANDARDS**

**COMMITMENT D1: SURFACE WATER QUALITY**

This project may be in the vicinity of multiple streams and wetlands. These waters are considered waters of the state and are protected under Administrative Rules of South Dakota (ARSD) Chapter 74:51. Special construction measures may have to be taken to ensure that this water body is not impacted.

**Action Taken/Required:**

The Contractor is advised that the South Dakota Surface Water Quality Standards, administered by the South Dakota Department of Agriculture and Natural Resources (DANR), apply to this project. Special construction measures will be taken to ensure the above standard(s) of the surface waters are maintained and protected.



**COMMITMENT D2: SURFACE WATER DISCHARGE**

The DANR General Permit for Temporary Discharge is required for temporary dewatering and discharges to waters of the state. The effluent limit for total suspended solids will be 90 mg/L 30-day average. The effluent limit applies to discharges to all waters of the state except discharges to waters classified as cold water permanent fish life propagation waters according to the ARSD 74:51:01:45. For discharges to waters of the state classified as cold water permanent fish life propagation waters, the effluent limit for total suspended solids will be 53 mg/L daily maximum.

The permittee has the option of completing effluent testing or implementing a pollution prevention plan for compliance with this permit. If the permittee develops a pollution prevention plan instead of total suspended solids sampling, the plan must be developed and implemented prior to discontinuing total suspended solids sampling. Refer to Section 4.0 of the permit. If any pollutants are suspected of being discharged, a sample must be taken for those parameters listed in Section 3.4 of the permit.

Refer to Commitment D1: Surface Water Quality for stream classification.

**Action Taken/Required:**

If construction dewatering is required and this project is currently covered under a General Permit for Stormwater Discharges Associated with Construction Activities, the contractor will need to submit the dewatering information to the SDDANR using the following form:

<  
[https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR\\_AddTempInfoFillable.pdf](https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_AddTempInfoFillable.pdf) >

The Contractor will provide a copy of the approved permit or the submitted dewatering information to the Project Engineer prior to proceeding with any dewatering activities. The approved permit or submitted dewatering information must be kept on-site and as part of the project records.

Effluent monitoring, as a result of dewatering activities, will be summarized for each month and recorded on a separate Discharge Monitoring Report (DMR) and submitted to DANR monthly. Additional information can be found at:

<  
<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/swdpermitting/Ereporting.aspx> >

**COMMITMENT E: STORM WATER**

Construction activities constitute 1 acre or more of earth disturbance and/or work in a waterway.

**Action Taken/Required:**

The EPA 2017 Construction General Permit is required for this project. The SDDOT is the owner of this permit and will submit the NOI to EPA 15 days prior to project start in order to obtain coverage. Work can begin after authorization is received from the EPA. This permit provides coverage for construction and dewatering activities for this project.

The Contractor must adhere to the "Special Provision Regarding Storm Water Discharge to Waters of the United States within Indian Reservations".

**Storm Water Pollution Prevention Plan**

The Storm Water Pollution Prevention Plan (SWPPP) will be developed prior to the submittal of the NOI and will be implemented for all construction activities for compliance with the permit. The SWPPP must be kept on-site and updated as site conditions change. Erosion control measures and best management practices will be implemented in accordance with the SWPPP.

The DOT 298 Form will be used for site inspections and to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents and retained for a minimum of three years.

The inspection will include disturbed areas of the construction site that have not been finally stabilized, areas used for storage materials, structural control measures, and locations where vehicles enter or exit the site. These areas will be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWPPP will be observed to ensure that they are operating correctly, and sediment is not tracked off the site.

Information on storm water permits and SWPPPs are available on the following websites:

SDDOT: < <https://dot.sd.gov/doing-business/environmental/stormwater> >

DANR:<  
<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/default.aspx> >

EPA: < <https://www.epa.gov/npdes> >

**COMMITMENT G: DEWATERING AND SEDIMENT COLLECTION**

The purpose of a dewatering and sediment collection system is to collect turbid stormwater on the project, treat it with flocculants as needed, and capture the sediment that falls out of suspension before the water is discharged into "Waters of the US" or "Waters of the State". Refer to Commitment D1: Surface Water Quality for stream classification.

**Action Taken/Required:**

The Contractor will meet the terms of the Temporary Discharge Permit and the Storm Water Permit for Construction Activities.

The Contractor will create a Pollution Prevention Plan (PPP) for dewatering and sediment collection if the Contractor chooses to discharge the water into "Waters of the US" or "Waters of the State". Refer to the detail sheet OPTIONS FOR DEWATERING AND SEDIMENT COLLECTION in the plans. The PPP must be kept on-site and updated as site conditions change.

**COMMITMENT H: WASTE DISPOSAL SITE**

The Contractor will furnish a site(s) for the disposal of construction and/or demolition debris generated by this project.

**Action Taken/Required:**

Construction and/or demolition debris may not be disposed of within the Public ROW.

The waste disposal site(s) will be managed and reclaimed in accordance with the following from the General Permit for Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Agriculture and Natural Resources.

The waste disposal site(s) will not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Environmental Office and the Project Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements will apply:

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials will be buried in a trench separate from wood debris. The final cover over the construction and/or demolition debris will consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW will be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor will control the access to waste disposal sites not within the Public ROW with fences, gates, and placement of a sign or signs at the entrance to the site stating, "No Dumping Allowed".
2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period not to exceed the duration of the project. Prior to project completion, the waste will be removed from view of the ROW or buried, and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06.

Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) will be incidental to the various contract items.



**COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES**

The SDDOT has obtained concurrence with the Oglala Sioux Tribe Tribal Historic Preservation Office (OST THPO) for all work included within the project limits and all department designated sources and designated option material sources, stockpile sites, storage areas, and waste sites provided within the plans.

**Action Taken/Required:**

All earth disturbing activities not designated within the plans require a cultural resource review prior to scheduling the pre-construction meeting. This work includes but is not limited to: Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas.

The Contractor will arrange and pay for a record search and when necessary, a cultural resource survey. The Contractor has the option to contact the state Archaeological Research Center (ARC) at 605-394-1936 or another qualified archaeologist, to obtain either a records search or a cultural resources survey. A record search might be sufficient for review if the site was previously surveyed; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor will provide ARC with the following: a topographical map or aerial view in which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that artifacts have not been found on the site.

The Contractor will submit the cultural resources survey report to SDDOT Environmental Office, 700 East Broadway Avenue, Pierre, SD 57501-2586. SDDOT will submit the information to the OST THPO. Allow **30 Days** from the date this information is submitted to the Environmental Engineer for THPO review.

In the event of an inadvertent discovery of human remains, funerary objects, or if evidence of cultural resources is identified during project construction activities, then such activities within 150 feet of the inadvertent discovery will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will contact the OST THPO within 48 hours of the discovery to determine an appropriate course of action.

THPO review does not relieve the Contractor of the responsibility for obtaining any additional permits and clearances for Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas that affect wetlands, threatened and endangered species, or waterways. The Contractor will not utilize a site known or suspected of having contaminated soil or water. The Contractor will provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

**COMMITMENT L: CONTAMINATED MATERIAL**

Contaminated soil and/or known gas stations, undergrounds storage tanks, etc. are located within the project limits. Petroleum contaminated soil may be or is located at the following sites:

Description	Station	L / R
PCN 04FC – Pine Ridge Oil Company	107+00 – 108+00	L
PCN 04FC – Yellow Birds Gas Station	119+00	R
PCN 06N3 – Big Bats Conoco Gas Station	213+00 – 215+00	L

**Action Taken/Required:**

The Contractor will give written notice, with a copy to the Area Engineer and DANR, 30 days prior to the start of work. In addition, the Contractor will give written notice to the Engineer 7 days prior to the commencement of the work so the Engineer may notify DANR of the day work will start.

The Contractor will give notice to the Engineer when contaminated soil is encountered on the project. The Engineer will contact the Environmental Office so that contact with the DANR and consultant to inspect and monitor removal of any contaminated soil can be initiated.

The Contractor will be responsible for having the existing underground utilities located in the construction area. Underground utilities damaged by the Contractor due to negligence will be repaired at the Contractor's expense.

Petroleum contaminated soil may be disposed of at the Custer Fall River Landfill (phone 605-662-7760). Measurement of "Contaminated Material Excavation" will be in accordance with Section 120.4 of the Specifications. All costs for excavating and transporting the contaminated materials to the disposal site and all fees charged per cubic yard by the disposal site will be incidental to the contract unit price per cubic yard for "Contaminated Material Excavation".

The estimated quantity of "Contaminated Material Excavation" is 100 cubic yards. The quantity of "Contaminated Material Excavation" may vary from the plans. No adjustment will be made to the contract unit price for variations in the quantity of "Contaminated Material Excavation". The estimated quantity of "Contaminated Material Excavation" is provided in Section B – Grading Plans.

**COMMITMENT N: SECTION 404 PERMIT**

The SDDOT has obtained a Section 404 Permit from the USACE for the permanent actions associated with this project.

**Action Taken/Required:**

The Contractor will comply with all requirements contained in the Section 404 Permit.

The Contractor will also be responsible for obtaining a Section 404 Permit for any dredge, excavation, or fill activities associated with material sources, storage areas, waste sites, and Contractor work sites outside the plan work limits that affect wetlands, floodplains, or waters of the United States.

**COMMITMENT O: SECTION 401 WATER QUALITY CERTIFICATION**

The SDDOT has obtained a Clean Water Act Section 401 Water Quality Certification from the Environmental Protection Agency (EPA) regarding an US Army Corp of Engineers CWA Section 404 Permit for the actions associated with this project.

**Action Taken/Required:**

The Contractor will comply with all requirements contained in the Section 401 certification. A copy of the EPA CWA 401 Certification must be retained on-site.

**COMMITMENT Q: ARCHAEOLOGICAL COORDINATION**

As a result of a Cultural Resources Survey, a historic property has been identified adjacent to the project rights-of-way.

The following historic property has been identified and requires avoidance of construction activities:

**Table of Historic Properties**

Station	Offset (Ft.)	L/R	Environmental Sensitive Site	Action
107+25 – 108+00	50	R	ESS-1	Do Not Disturb

The locations and boundaries of the site(s) for avoidance are shown in the plans.

**Action Taken/Required:**

If evidence for cultural resources is uncovered during project construction activities, then such activities within 150 feet of the inadvertent discovery will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will consult with the Archaeological Research Center (ARC), the Oglala Sioux Tribe THPO, and FHWA, to determine the appropriate course of action.

All artifacts, features, or other items of interest uncovered by project construction activities will not be displaced unless the landowner and the THPO consent to it.

