

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA P 0049(10)42 SHEET TOTAL SHEETS

NH 0018(239)244 P 0049(10)42 A1 A4

Revised 2/24/2025 JPJ

Section C - Traffic Control

Section D - Erosion and Sediment Control

PCN 08H9

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E4100	Construction Schedule, Category I	Lump Sum	LS
634E0010	Flagging	800.0	Hour
634E0110	Traffic Control Signs	877.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0135	Traffic Control Supervisor	Lump Sum	LS
634E0275	Type 3 Barricade	4	Each
634E0310	Temporary Flexible Vertical Markers (Tabs)	18,748	Ft
634E0400	Type A Advance Warning Arrow Board	2	Each
634E0525	Linear Delineation System Panel, Barrier Mounted	140	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	100	Ft
634E0600	4" Temporary Pavement Marking Tape Type I	864	Ft
634E0640	Temporary Pavement Marking	627	Ft
634E0700	Traffic Control Movable Concrete Barrier	140	Each
634E0705	Remove and Reset Traffic Control Movable Concrete Barrier	82	Each
634E0750	Temporary Concrete Barrier End Protection	6	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	14	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	1	Each
634E0900	Portable Temporary Traffic Control Signal	2	Unit
634E1002	Detour and Restriction Signing	500.0	SqFt

PCN 08HC

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E4100	Construction Schedule, Category I	Lump Sum	LS
634E0010	Flagging	100.0	Hour
634E0110	Traffic Control Signs	163.4	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0135	Traffic Control Supervisor	Lump Sum	LS
634E0310	Temporary Flexible Vertical Markers (Tabs)	3,350	Ft
634E0525	Linear Delineation System Panel, Barrier Mounted	46	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	100	Ft
634E0600	4" Temporary Pavement Marking Tape Type I	144	Ft
634E0640	Temporary Pavement Marking	168	Ft
634E0700	Traffic Control Movable Concrete Barrier	46	Each
634E0750	Temporary Concrete Barrier End Protection	2	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	2	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	1	Each
634E1002	Detour and Restriction Signing	701.0	SqFt

PCN 08H9

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
230E0100	Remove and Replace Topsoil	Lump Sum	LS
734E0010	Erosion Control	Lump Sum	LS

PCN 08HC

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
230E0100	Remove and Replace Topsoil	Lump Sum	LS
734E0010	Erosion Control	Lump Sum	LS

INDEX OF SHEETS

A1 to A3 Estimate of Quantities for Sections C, D, E, F and M Environmental Commitments

STATE OF SOUTH DAKOTA P 0049(10)42 SHEET TOTAL SHEETS PROJECT SHEET TOTAL SHEETS A4 A4

Section E – Structure

Structure No. 62-233-315 (PCN 08H9)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
110E0020	Remove Bridge Railing	200	Ft
460E0010	Class A45 Concrete, Bridge Barrier	15.6	CuYd
460E0300	Breakout Structural Concrete	2.4	CuYd
460E0380	Install Dowel in Concrete	194	Each
480E0200	Epoxy Coated Reinforcing Steel	1,228	Lb
480E5000	Galvanic Anode	16	Each
550E0010	Low Slump Dense Concrete Bridge Deck Overlay	39	CuYd
550E0100	Concrete Removal Type 1A	513.4	SqYd
550E0105	Concrete Removal Type 2A	128.3	SqYd
550E0110	Concrete Removal Type 1B	51.3	SqYd
550E0120	Concrete Removal Type 1C	25.7	SqYd
550E0130	Concrete Removal Type 1D	25.7	SqYd
550E0140	Concrete Removal Type B	20.0	Ft
550E0200	Class A45 Concrete Fill	7.8	CuYd
550E0500	Finishing and Curing	513.4	SqYd

Structure No. 62-215-291 (PCN 08H9)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
110E0020	Remove Bridge Railing	212	Ft
460E0010	Class A45 Concrete, Bridge Barrier	16.4	CuYd
460E0300	Breakout Structural Concrete	2.4	CuYd
460E0380	Install Dowel in Concrete	206	Each
480E0200	Epoxy Coated Reinforcing Steel	1,286	Lb
480E5000	Galvanic Anode	16	Each
550E0010	Low Slump Dense Concrete Bridge Deck Overlay	43	CuYd
550E0100	Concrete Removal Type 1A	545.2	SqYd
550E0105	Concrete Removal Type 2A	136.2	SqYd
550E0110	Concrete Removal Type 1B	54.5	SqYd
550E0120	Concrete Removal Type 1C	27.2	SqYd
550E0130	Concrete Removal Type 1D	27.2	SqYd
550E0140	Concrete Removal Type B	20.0	Ft
550E0200	Class A45 Concrete Fill	8.8	CuYd
550E0500	Finishing and Curing	545.2	SqYd

Structure No. 62-149-270 (PCN 08H9)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
460E0010	Class A45 Concrete, Bridge Barrier	3.0	CuYd
460E0300	Breakout Structural Concrete	3.0	CuYd
460E0380	Install Dowel in Concrete	32	Each
480E0200	Epoxy Coated Reinforcing Steel	278	Lb
480E5000	Galvanic Anode	16	Each
550E0010	Low Slump Dense Concrete Bridge Deck Overlay	24	CuYd
550E0100	Concrete Removal Type 1A	354.4	SqYd
550E0105	Concrete Removal Type 2A	88.6	SqYd
550E0110	Concrete Removal Type 1B	95.0	SqYd
550E0120	Concrete Removal Type 1C	47.6	SqYd
550E0130	Concrete Removal Type 1D	47.6	SqYd
550E0140	Concrete Removal Type B	20.0	Ft
550E0200	Class A45 Concrete Fill	13.2	CuYd
550E0500	Finishing and Curing	354.4	SqYd

Structure No. 62-115-270 (PCN 08H9)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
550E0010	Low Slump Dense Concrete Bridge Deck Overlay	22	CuYd
550E0100	Concrete Removal Type 1A	322.6	SqYd
550E0105	Concrete Removal Type 2A	80.7	SqYd
550E0110	Concrete Removal Type 1B	132.6	SqYd
550E0120	Concrete Removal Type 1C	66.2	SqYd
550E0130	Concrete Removal Type 1D	66.2	SqYd
550E0140	Concrete Removal Type B	20.0	Ft
550E0200	Class A45 Concrete Fill	14.8	CuYd
550E0500	Finishing and Curing	322.6	SqYd

Structure No. 62-183-274 (PCN 08H9)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
410E2600	Membrane Sealant Expansion Joint	111.2	Ft
460E0070	Class A45 Concrete, Bridge Repair	7.7	CuYd
460E0300	Breakout Structural Concrete	7.7	CuYd
460E0380	Install Dowel in Concrete	64	Each
480E0200	Epoxy Coated Reinforcing Steel	1,687	Lb
480E0504	No. 4 Rebar Splice	4	Each
480E0505	No. 5 Rebar Splice	4	Each
480E0506	No. 6 Rebar Splice	4	Each
480E5000	Galvanic Anode	12	Each
550E0010	Low Slump Dense Concrete Bridge Deck Overlay	61	CuYd
550E0100	Concrete Removal Type 1A	834.0	SqYd
550E0105	Concrete Removal Type 2A	208.5	SqYd
550E0110	Concrete Removal Type 1B	183.0	SqYd
550E0120	Concrete Removal Type 1C	91.6	SqYd
550E0130	Concrete Removal Type 1D	91.6	SqYd
550E0140	Concrete Removal Type B	20.0	Ft
550E0200	Class A45 Concrete Fill	22.2	CuYd
550E0500	Finishing and Curing	834.0	SqYd

Structure No. 62-283-124 (PCN 08HC)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
120E3120	Bridge Berm Repair	2	Each
464E0100	Controlled Density Fill	1.4	CuYd
550E0010	Low Slump Dense Concrete Bridge Deck Overlay	43	CuYd
550E0100	Concrete Removal Type 1A	553.4	SqYd
550E0105	Concrete Removal Type 2A	138.4	SqYd
550E0110	Concrete Removal Type 1B	83.0	SqYd
550E0120	Concrete Removal Type 1C	41.6	SqYd
550E0130	Concrete Removal Type 1D	41.6	SqYd
550E0140	Concrete Removal Type B	20.0	Ft
550E0200	Class A45 Concrete Fill	5.2	CuYd
550E0500	Finishing and Curing	553.4	SqYd

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0018(239)244 P 0049(10)42	A3	A4

Section F - Surfacing

PCN 08H9

110E0730 Remove Beam Guardrail 1,068.8 Ft 110E0810 Remove Rubrail 96.0 Ft 110E1010 Remove Asphalt Concrete Pavement 2,164.0 SqY 110E1140 Remove Concrete Sidewalk 26.1 SqY 120E0010 Unclassified Excavation 409 CuY 120E3000 Placing Embankment 10 CuY 260E1010 Base Course 232.2 Tor 260E1030 Base Course 232.2 Tor 270E0022 Salvage Asphalt Mix Material 137.2 Tor 270E0110 Salvage and Stockpile Granular Material 340.4 Tor 270E0230 Haul and Stockpile Asphalt Mix Material 137.2 Tor 380E0030 Asphalt Concrete Composite 191.8 Tor 380E0600 8.5" Nonreinforced PCC Pavement 486.2 SqY 380E0600 Dowel Bar 231 Eac 380E06110 Insert Steel Bar in PCC Pavement 56 Eac 630E01010 Straight Class A W Beam Guardrail with Woo	BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E0810 Remove Rubrail 96.0 Ft 110E1010 Remove Asphalt Concrete Pavement 2,164.0 SqY 110E1140 Remove Concrete Sidewalk 26.1 SqY 120E0010 Unclassified Excavation 409 CuY 120E3000 Placing Embankment 10 CuY 260E1010 Base Course 232.2 Tor 260E1030 Base Course 232.2 Tor 270E0022 Salvage Asphalt Mix Material 137.2 Tor 270E0110 Salvage and Stockpile Granular Material 340.4 Tor 270E0230 Haul and Stockpile Asphalt Mix Material 137.2 Tor 380E0300 Asphalt Concrete Composite 191.8 Tor 380E0600 8.5" Nonreinforced PCC Pavement 486.2 SqY 380E6000 Dowel Bar 231 Eac 380E6010 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 75.0 Ft 630E0500 Type 1 M	110E0300	Remove Concrete Curb and/or Gutter	49	Ft
110E1010 Remove Asphalt Concrete Pavement 2,164.0 SqY 110E1140 Remove Concrete Sidewalk 26.1 SqY 120E0010 Unclassified Excavation 409 CuY 120E3000 Placing Embankment 10 CuY 260E1010 Base Course 232.2 Tor 260E1030 Base Course 232.2 Tor 270E0122 Salvage Asphalt Mix Material 137.2 Tor 270E0110 Salvage and Stockpile Granular Material 340.4 Tor 270E0230 Haul and Stockpile Asphalt Mix Material 137.2 Tor 30E1200 Asphalt Concrete Composite 191.8 Tor 380E0000 Base Sim Nonreinforced PCC Pavement 486.2 SqY 380E0000 Dowel Bar 231 Eac 380E6100 Insert Steel Bar in PCC Pavement 56 Eac 630E0100 Straight Double Class A Thrie Beam Guardrail with Wood Posts 75.0 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1010 Straight	110E0730	Remove Beam Guardrail	1,068.8	Ft
110E1140 Remove Concrete Sidewalk 26.1 SqY 120E0010 Unclassified Excavation 409 CuY 120E3000 Placing Embankment 10 CuY 260E1010 Base Course 232.2 Tor 260E1030 Base Course, Salvaged 340.4 Tor 270E0022 Salvage Asphalt Mix Material 137.2 Tor 270E0110 Salvage and Stockpile Granular Material 340.4 Tor 270E0230 Haul and Stockpile Asphalt Mix Material 137.2 Tor 320E1200 Asphalt Concrete Composite 191.8 Tor 380E0060 8.5" Nonreinforced PCC Pavement 486.2 SqY 380E6000 Dowel Bar 231 Eac 380E6110 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 75.0 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1015 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1025	110E0810	Remove Rubrail	96.0	Ft
120E0010 Unclassified Excavation 409 CuY 120E3000 Placing Embankment 10 CuY 260E1010 Base Course 232.2 Tor 260E1030 Base Course, Salvaged 340.4 Tor 270E0022 Salvage Asphalt Mix Material 137.2 Tor 270E0110 Salvage and Stockpile Granular Material 340.4 Tor 270E0230 Haul and Stockpile Asphalt Mix Material 137.2 Tor 320E1200 Asphalt Concrete Composite 191.8 Tor 380E0000 8.5" Nonreinforced PCC Pavement 486.2 SqY 380E6000 Dowel Bar 231 Eac 380E6110 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 75.0 Ft 630E0101 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0	110E1010	Remove Asphalt Concrete Pavement	2,164.0	SqYd
120E3000 Placing Embankment 10 CuY 260E1010 Base Course 232.2 Tor 260E1030 Base Course, Salvaged 340.4 Tor 270E0022 Salvage Asphalt Mix Material 137.2 Tor 270E0110 Salvage and Stockpile Granular Material 340.4 Tor 270E0230 Haul and Stockpile Asphalt Mix Material 137.2 Tor 320E1200 Asphalt Concrete Composite 191.8 Tor 380E0000 8.5" Nonreinforced PCC Pavement 486.2 SqY 380E6000 Dowel Bar 231 Eac 380E6110 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 12.5 Ft 630E01010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1035 W Beam Guardrail Transition 1	110E1140	Remove Concrete Sidewalk	26.1	SqYd
260E1010 Base Course 232.2 Tor 260E1030 Base Course, Salvaged 340.4 Tor 270E0022 Salvage Asphalt Mix Material 137.2 Tor 270E0110 Salvage and Stockpile Granular Material 340.4 Tor 270E0230 Haul and Stockpile Asphalt Mix Material 137.2 Tor 320E1200 Asphalt Concrete Composite 191.8 Tor 380E0000 8.5" Nonreinforced PCC Pavement 486.2 SqY 380E6000 Dowel Bar 231 Eac 380E6110 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 12.5 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition 1	120E0010	Unclassified Excavation	409	CuYd
260E1030 Base Course, Salvaged 340.4 Tor 270E0022 Salvage Asphalt Mix Material 137.2 Tor 270E0110 Salvage and Stockpile Granular Material 340.4 Tor 270E0230 Haul and Stockpile Asphalt Mix Material 137.2 Tor 320E1200 Asphalt Concrete Composite 191.8 Tor 380E0060 8.5" Nonreinforced PCC Pavement 486.2 SqY 380E6000 Dowel Bar 231 Eac 380E6110 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 12.5 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1030 Type 1 Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition	120E3000	Placing Embankment	10	CuYd
270E0022 Salvage Asphalt Mix Material 137.2 Tor 270E0110 Salvage and Stockpile Granular Material 340.4 Tor 270E0230 Haul and Stockpile Asphalt Mix Material 137.2 Tor 320E1200 Asphalt Concrete Composite 191.8 Tor 380E0060 8.5" Nonreinforced PCC Pavement 486.2 SqY 380E6000 Dowel Bar 231 Eac 380E6110 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 12.5 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1010 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1000 W Beam to Thrie Beam Guardrail Transition 12 Eac 630E2017 MGS MASH Fla	260E1010	Base Course	232.2	Ton
270E0110 Salvage and Stockpile Granular Material 340.4 Tor 270E0230 Haul and Stockpile Asphalt Mix Material 137.2 Tor 320E1200 Asphalt Concrete Composite 191.8 Tor 380E0060 8.5" Nonreinforced PCC Pavement 486.2 SqY 380E6000 Dowel Bar 231 Eac 380E6110 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 12.5 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1500 Type 1 Guardrail Transition 12 Eac 630E2001 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2018 MGS MASH Flared End Terminal 1 Eac 630E2035 W Beam Guardrail Special Anchor Assembl	260E1030	Base Course, Salvaged	340.4	Ton
270E0230 Haul and Stockpile Asphalt Mix Material 137.2 Tor 320E1200 Asphalt Concrete Composite 191.8 Tor 380E0060 8.5" Nonreinforced PCC Pavement 486.2 SqY 380E6000 Dowel Bar 231 Eac 380E6110 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 12.5 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1500 Type 1 Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2017 MGS MASH Flared End Terminal 1 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Re	270E0022	Salvage Asphalt Mix Material	137.2	Ton
320E1200 Asphalt Concrete Composite 191.8 Tor 380E0060 8.5" Nonreinforced PCC Pavement 486.2 SqY 380E6000 Dowel Bar 231 Eac 380E6110 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 12.5 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1005 Type 1 Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2017 MGS MASH Flared End Terminal 1 Eac 630E2018 MGS MASH Tangent End Terminal 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 630E2020 Guardrail Delineator 52	270E0110	Salvage and Stockpile Granular Material	340.4	Ton
380E0060 8.5" Nonreinforced PCC Pavement 486.2 SqY 380E6000 Dowel Bar 231 Eac 380E6110 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 12.5 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1025 Type 1 Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2017 MGS MASH Flared End Terminal 1 Eac 630E2018 MGS MASH Tangent End Terminal 11 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 630E2020 Guardrail Delineator <td< td=""><td>270E0230</td><td>Haul and Stockpile Asphalt Mix Material</td><td>137.2</td><td>Ton</td></td<>	270E0230	Haul and Stockpile Asphalt Mix Material	137.2	Ton
380E6000 Dowel Bar 231 Eac 380E6110 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 12.5 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1500 Type 1 Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2017 MGS MASH Flared End Terminal 1 Eac 630E2018 MGS MASH Tangent End Terminal 11 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 630E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	320E1200	Asphalt Concrete Composite	191.8	Ton
380E6110 Insert Steel Bar in PCC Pavement 56 Eac 630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 12.5 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1500 Type 1 Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2017 MGS MASH Flared End Terminal 1 Eac 630E2018 MGS MASH Tangent End Terminal 11 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 630E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	380E0060	8.5" Nonreinforced PCC Pavement	486.2	SqYd
630E0110 Straight Double Class A Thrie Beam Guardrail with Wood Posts 12.5 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1500 Type 1 Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2017 MGS MASH Flared End Terminal 1 Eac 630E2018 MGS MASH Tangent End Terminal 11 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 630E2020 Guardrail Delineator 52 Eac 650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	380E6000	Dowel Bar	231	Each
630E0110 Posts 12.5 Ft 630E0500 Type 1 MGS 612.5 Ft 630E1010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1500 Type 1 Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2017 MGS MASH Flared End Terminal 1 Eac 630E2018 MGS MASH Tangent End Terminal 11 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 632E2220 Guardrail Delineator 52 Eac 650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	380E6110	Insert Steel Bar in PCC Pavement	56	Each
630E1010 Straight Class A W Beam Guardrail with Wood Posts 75.0 Ft 630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1500 Type 1 Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2017 MGS MASH Flared End Terminal 1 Eac 630E2018 MGS MASH Tangent End Terminal 11 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 630E2020 Guardrail Delineator 52 Eac 650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	630E0110		12.5	Ft
630E1015 Straight Class A W Beam Guardrail with CRT Posts 12.5 Ft 630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1500 Type 1 Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2017 MGS MASH Flared End Terminal 1 Eac 630E2018 MGS MASH Tangent End Terminal 11 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 632E2220 Guardrail Delineator 52 Eac 650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	630E0500	Type 1 MGS	612.5	Ft
630E1025 Curved Class A W Beam Guardrail with CRT Posts 50.0 Ft 630E1500 Type 1 Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2017 MGS MASH Flared End Terminal 1 Eac 630E2018 MGS MASH Tangent End Terminal 11 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 632E2220 Guardrail Delineator 52 Eac 650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	630E1010	Straight Class A W Beam Guardrail with Wood Posts	75.0	Ft
630E1500 Type 1 Guardrail Transition 12 Eac 630E2000 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2017 MGS MASH Flared End Terminal 1 Eac 630E2018 MGS MASH Tangent End Terminal 11 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 632E2220 Guardrail Delineator 52 Eac 650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	630E1015	Straight Class A W Beam Guardrail with CRT Posts	12.5	Ft
630E2000 W Beam to Thrie Beam Guardrail Transition 1 Eac 630E2017 MGS MASH Flared End Terminal 1 Eac 630E2018 MGS MASH Tangent End Terminal 11 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 632E2220 Guardrail Delineator 52 Eac 650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	630E1025	Curved Class A W Beam Guardrail with CRT Posts	50.0	Ft
630E2017 MGS MASH Flared End Terminal 1 Eac 630E2018 MGS MASH Tangent End Terminal 11 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 632E2220 Guardrail Delineator 52 Eac 650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	630E1500	Type 1 Guardrail Transition	12	Each
630E2018 MGS MASH Tangent End Terminal 11 Eac 630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 632E2220 Guardrail Delineator 52 Eac 650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	630E2000	W Beam to Thrie Beam Guardrail Transition	1	Each
630E2035 W Beam Guardrail Special Anchor Assembly 1 Eac 630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 632E2220 Guardrail Delineator 52 Eac 650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	630E2017	MGS MASH Flared End Terminal	1	Each
630E2095 Assembly for Missing Post in Transition Retrofit 2 Eac 632E2220 Guardrail Delineator 52 Eac 650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	630E2018	MGS MASH Tangent End Terminal	11	Each
632E2220 Guardrail Delineator 52 Eac 650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	630E2035	W Beam Guardrail Special Anchor Assembly	1	Each
650E0085 Type B68.5 Concrete Curb and Gutter 49 Ft 651E0040 4" Concrete Sidewalk 235 SqF	630E2095	Assembly for Missing Post in Transition Retrofit	2	Each
651E0040 4" Concrete Sidewalk 235 SqF	632E2220	Guardrail Delineator	52	Each
	650E0085	Type B68.5 Concrete Curb and Gutter	49	Ft
831E0300 Reinforcement Fabric (MSE) 706 SqY	651E0040	4" Concrete Sidewalk	235	SqFt
100 041	831E0300	Reinforcement Fabric (MSE)	706	SqYd

Section M – Pavement Marking

PCN 08H9

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E0010	Cold Applied Plastic Pavement Marking, 4"	249	Ft
633E0019	Cold Applied Plastic Pavement Marking, 4" with Contrast Border	40	Ft
633E1220	High Build Waterborne Pavement Marking Paint, 4" White	1,176	Ft
633E1222	High Build Waterborne Pavement Marking Paint, 4" Yellow	468	Ft
633E5000	Grooving for Cold Applied Plastic Pavement Marking, 4"	249	Ft
633E5004	Grooving for Cold Applied Plastic Pavement Marking, 4" with Contrast Border	40	Ft

PCN 08HC

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1220	High Build Waterborne Pavement Marking Paint, 4" White	336	Ft
633E1222	High Build Waterborne Pavement Marking Paint, 4" Yellow	40	Ft

SPECIFICATIONS

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

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 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 B3: AMERICAN BURYING BEETLE

This project is in an area that contains habitat associated with the American Burying Beetle. All work included within the project limits, SDDOT designated sources and sites, and designated option sources and sites provided in the plans have been coordinated with the USFWS.

Action Taken/Required:

Earth disturbing activities will not occur outside the designated work limits shown in the plans unless specifically stated. The Contractor is responsible for obtaining USFWS review for any borrow sites, staging areas, waste sites, additional easements, and other ground disturbing activities outside the project work limits shown in the plans. At the pre-construction meeting the Contractor will provide the Project Engineer a copy of the USFWS review for any work outside the designated work limits shown in the plans to ensure all permit conditions and plans are clearly understood.

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 >

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	NH 0018(239)244 P 0049(10)42	A4	A4

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.