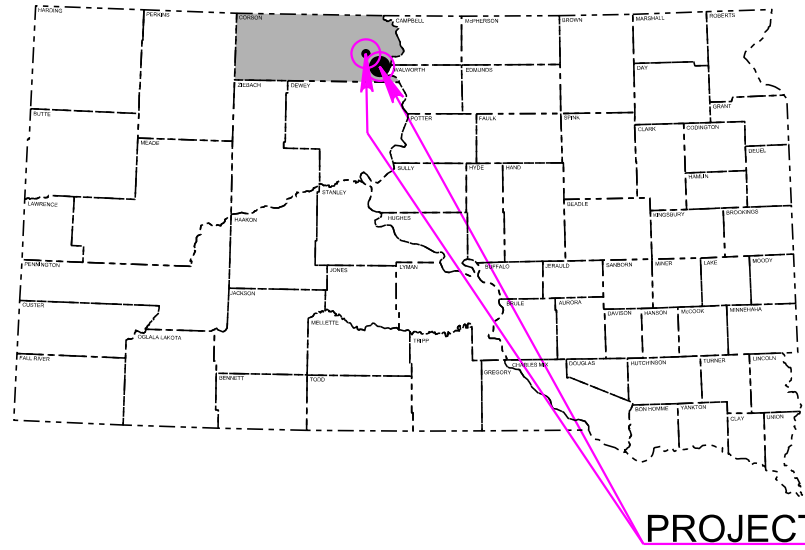


Plot Scale - 1:200

Plotted From - evanwolf



PROJECT

STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION

FOR BIDDING PURPOSES ONLY

PROJECT	SHEET	TOTAL SHEETS
NH 0012(230)171...+	1	265

Plotting Date: 6/24/2024

PLANS FOR PROPOSED  
PROJECTS NH 0012(230)171, P 1806(19)364  
P 1806(20)370, P 1806(22)359, & P 0063(59)252  
US HIGHWAY 12  
SD HIGHWAYS 1806, 1806P, & 63  
CORSON COUNTY

COLD MILLING ASPHALT CONCRETE, FULL DEPTH RECLAMATION,  
ASPHALT CONCRETE RESURFACING, GUARDRAIL, PIPE CULVERT REPAIR,  
& ROW PLANS  
PCN 05TY, 06A1, 06E0, 06RC, & 07CD

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 M: Pavement Marking Plans
- Section S: Permanent Signing
- Section X: Cross Sections
- Section Z: Pipe Sections



DESIGN DESIGNATION

US12	
AADT (2023)	1131
AADT (2043)	1477
DHV	235
D	50%
DHV T%	9.1%
AADT T%	20.1%
V	65 mph

STORM WATER PERMIT

Major Receiving  
Body of Water: Missouri  
Area Disturbed: 10 Acres  
Total Project Area: 301 Acres  
Approx. Begin Lat,Long:  
45°40'28.50"N  
100°39'15.18"W

BEGIN PROJECT

NH 0012(230)171  
PCN 05TY  
MRM 171.00+0.895  
STATION 176+72.20

Exception  
Str. No. 16-665-200  
Station 249+37 to  
Station 254+93  
556.0 Feet = .105 Miles  
MRM 173.40

EQUATION  
Station 278+05.50 Bk=  
Station a 0+00.00 Ah

Exception  
Str. No. 16-666-216  
Station a 55+28.0 to  
Station a 57+12.0  
184.0 Feet = .035 Miles  
MRM 174.92

Exception  
Str. No. 16-689-259  
Station a 327+17.09 to  
Station a 328+62.91  
145.82 Feet = .027 Miles  
MRM 180.08

EQUATION  
Station a 404+48.80 Bk=  
Station b 20+40.00 Ah

Begin Exception  
Station b 115+78.00  
MRM 183.00+0.203

EQUATION  
Station b 262+01.60 Bk=  
Station c 258+22.20 Ah

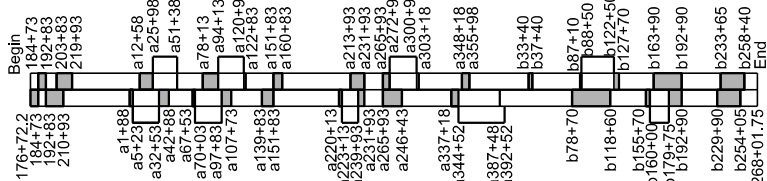
END PROJECT

NH 0012(230)171  
PCN 05TY  
MRM 186.00+0.185  
STATION c 268+01.75

End Exception  
Station b 208+31.00  
MRM 184.58+0.363

US12 Striping Diagram

□ Passing  
■ No Passing



US 12

14.421 Miles  
Length of Exceptions 1.920 Miles  
Net Length 12.421 Miles

This striping diagram is for informational purposes only. Actual striping for passing/no passing zones should be determined by field verified procedures.



7

November 20, 2024

File - ...Section Attitle\_05TY.dgn

PROJECTS NH 0012(230)171, P 1806(19)364, P 1806(20)370, P 1806(22)359, & P 0063(59)252

KLJ STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0012(230)171...+	2	265

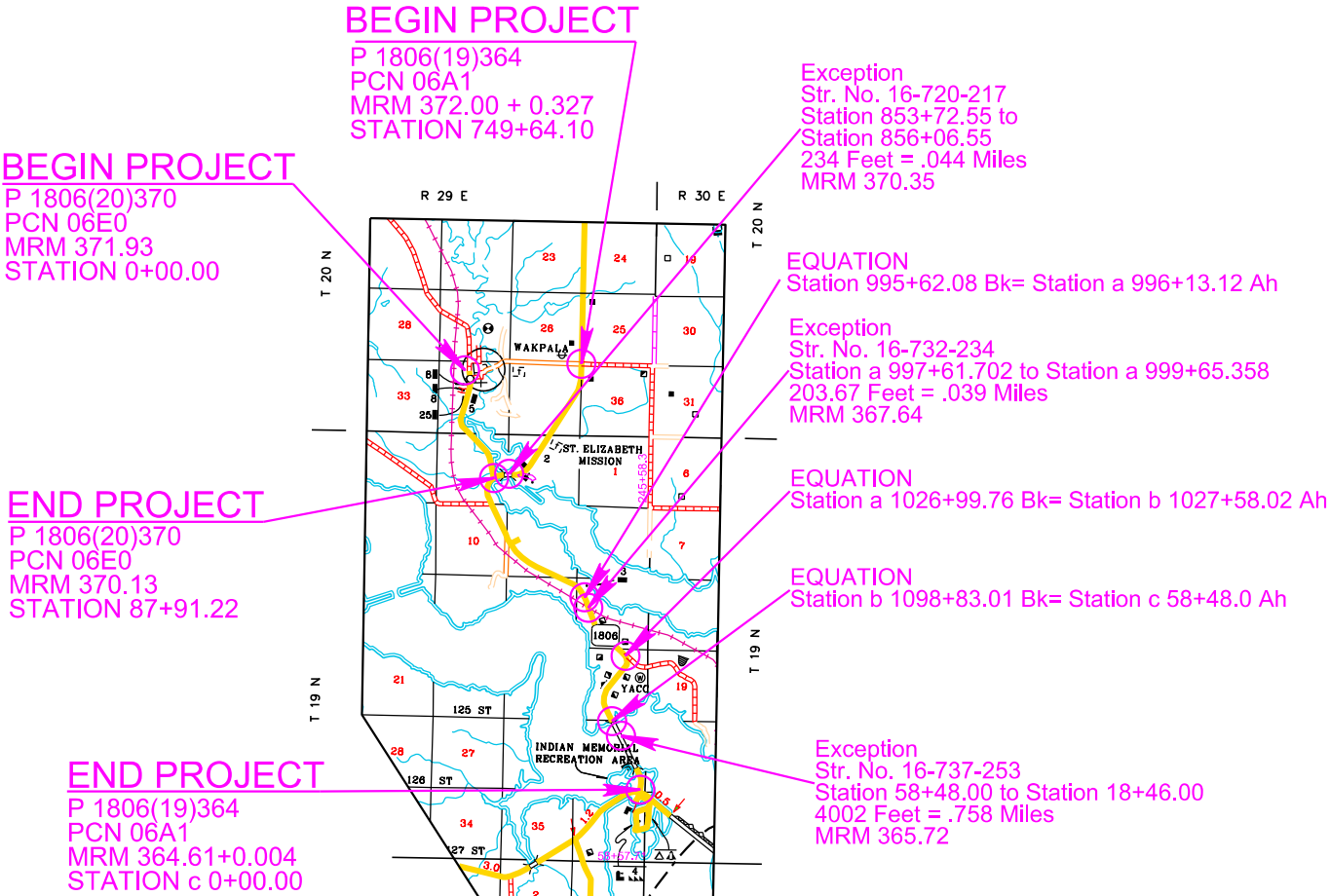
Plotting Date: 6/24/2024

Plot Scale - 1:200

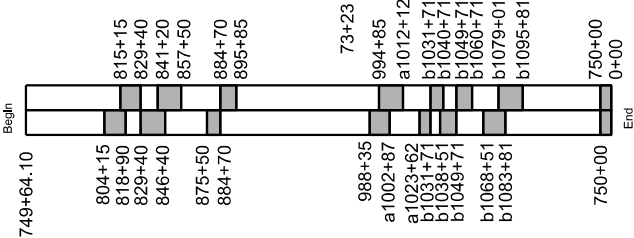


DESIGN DESIGNATION		STORM WATER PERMIT
SD 1806 (NORTH)		Major Receiving
AADT (2020)	707	Body of Water: Missouri
AADT (2040)	964	Area Disturbed: 34 Acres
DHV	154	Total Project Area: 125 Acres
D	50%	Approx. Begin Lat,Long:
DHV T%	3%	45.6606 (Google Maps)
AADT T%	6.6%	-100.5043 (Google Maps)
V	65 mph	

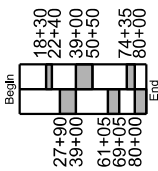
DESIGN DESIGNATION		STORM WATER PERMIT
SD 1806P		Major Receiving
AADT (2020)	320	Body of Water: Missouri
AADT (2040)	437	Area Disturbed: 6 Acres
DHV	70	Total Project Area: 30 Acres
D	50%	Approx. Begin Lat,Long:
DHV T%	4.5%	45.6581(Google Maps)
AADT T%	9.8%	-100.5366 (Google Maps)
V	55 mph	



SD1806 North of US12 Striping Diagram



SD1806P Striping Diagram



	SD 1806 (06A1)	SD 1806P
Gross Length	7.700 Miles	1.665 Miles
Length of Exceptions	0.841 Miles	0 Miles
Net Length	6.859 Miles	1.665 Miles

This striping diagram is for informational purposes only. Actual striping for passing/no passing zones should be determined by field verified procedures.



Plotted From - evanwolf

PROJECTS NH 0012(230)171, P 1806(19)364, P 1806(20)370, P 1806(22)359, & P 0063(59)252

KLJ	STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
		NH 0012(230)171...+	3	265

Plotting Date: 6/24/2024

Plot Scale - 1:200

Plotted From - evanwolf



END PROJECT

P 0063(59)252  
PCN 07CD  
MRM 254.00+0.028  
STATION 390+50.00

Exception  
Str. No. 16-580-075  
Sta. 366+22.83 to  
Sta. 368+17.17  
192.3 Feet = .037 Miles  
MRM 253.00+0.600

Exception  
Str. No. 16-580-084  
Sta. 318+10.11 to  
Sta. 319+67.88  
157.8 Feet = .029 Miles  
MRM 252.00+0.800

BEGIN PROJECT

P0063(59)252  
PCN 07CD  
MRM 252.00+0.086  
STATION 288+47.00

DESIGN DESIGNATION

SD 1806 (SOUTH)  
AADT (2020) 138  
AADT (2040) 188  
DHV 30  
D 50%  
DHV T% 3.9%  
AADT T% 8.6%  
V 55 mph

STORM WATER PERMIT

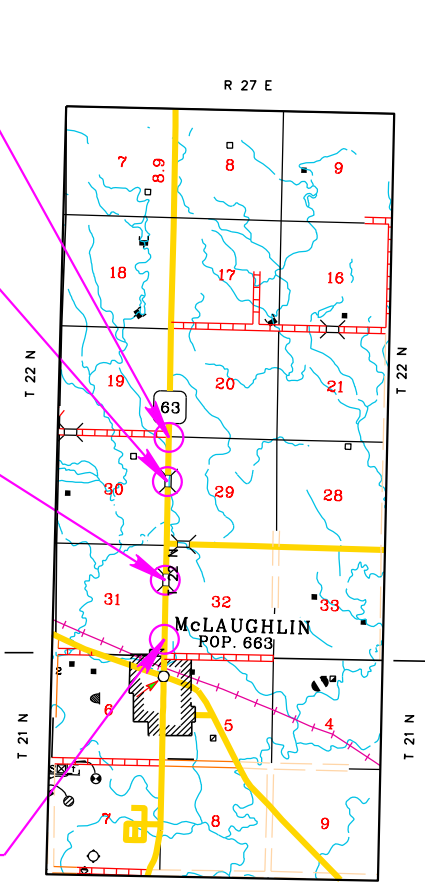
Major Receiving  
Body of Water: Missouri  
Area Disturbed: 17 Acres  
Total Project Area: 67 Acres  
Approx. Begin Lat,Long:  
45.5161 (Google Maps)  
-100.4908 (Google Maps)

DESIGN DESIGNATION

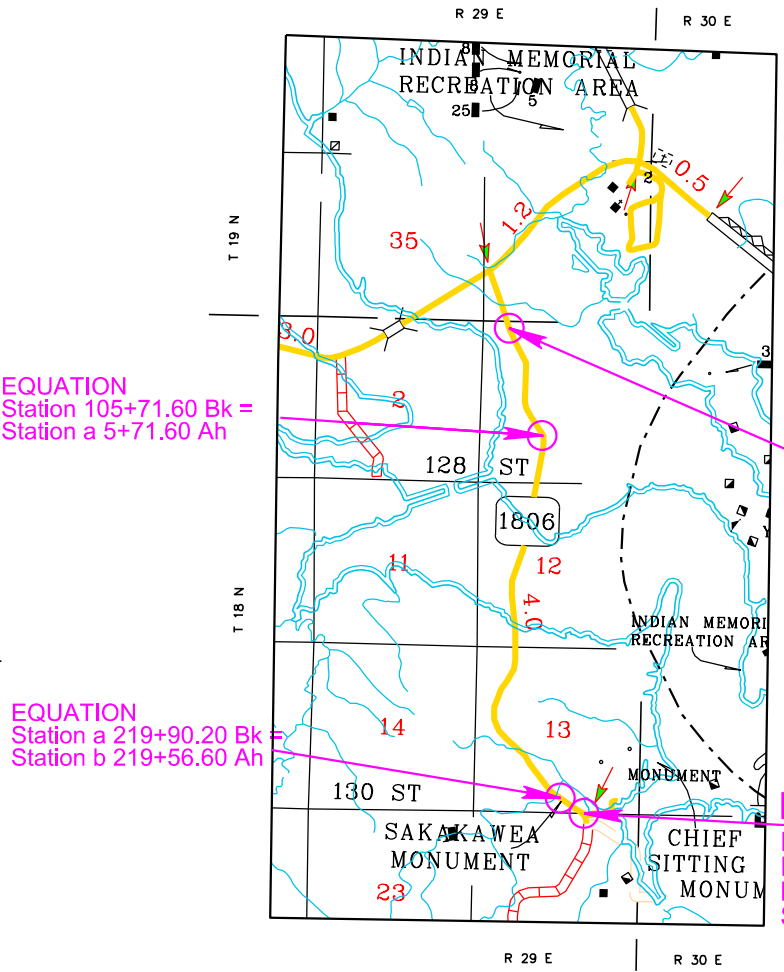
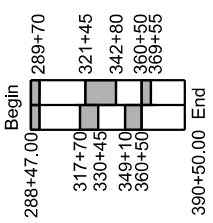
SD 63  
AADT (2020) 926  
AADT (2040) 1264  
DHV 201  
D 50%  
DHV T% 3.2%  
AADT T% 7.0%  
V 65 mph

STORM WATER PERMIT

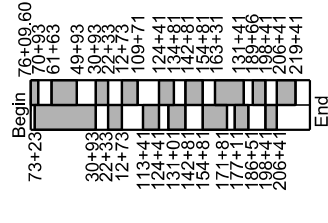
Major Receiving  
Body of Water: Oak Creek, Missouri  
Area Disturbed: 8 Acres  
Total Project Area: 19 Acres  
Approx. Begin Lat,Long:  
45.8202 (Google Maps)  
-100.8106 (Google Maps)



SD63 Striping Diagram



SD1806 South of US12 Striping Diagram



BEGIN PROJECT

P 1806(22)359  
PCN 06RC  
MRM 363.37  
STATION 69+11.74 =  
STATION 15+00.00 on 04XF

END PROJECT

P 1806(22)359  
PCN 06RC  
MRM 359.75  
STATION b 229+74.50

	SD 1806 (SOUTH)	SD 63
Gross Length	3.554 Miles	1.933 Miles
Length of Exceptions	0 Miles	0.067 Miles
Net Length	3.554 Miles	1.866 Miles

This striping diagram is for informational purposes only. Actual striping for passing/no passing zones should be determined by field verified procedures.





# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0012(230)171...+	A1	A8

Revised: 10/24/24 pk

## PCN 05TY – Section B – Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3210	Construction Staking	15.015	Mile
009E3250	Miscellaneous Staking	15.015	Mile
009E3280	Slope Staking	0.528	Mile
009E3301	Engineer Directed Surveying/Staking	50.0	Hour
009E4200	Construction Schedule, Category II	Lump Sum	LS
110E0135	Remove Delineator	7	Each
110E0500	Remove Pipe Culvert	46	Ft
110E0510	Remove Pipe End Section	19	Each
110E0595	Remove Cattle Pass End Section	6	Each
110E0600	Remove Fence	61	Ft
110E0730	Remove Beam Guardrail	1,400.0	Ft
110E7500	Remove Pipe for Reset	392	Ft
110E7510	Remove Pipe End Section for Reset	40	Each
120E0600	Contractor Furnished Borrow	16,432	CuYd
120E6100	Water for Embankment	249.2	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
450E0143	24" RCP Class 3, Furnish	8	Ft
450E0150	24" RCP, Install	8	Ft
450E0203	48" RCP Class 3, Furnish	8	Ft
450E0210	48" RCP, Install	8	Ft
450E0213	54" RCP Class 3, Furnish	8	Ft
450E0220	54" RCP, Install	8	Ft
450E2008	18" RCP Flared End, Furnish	8	Each
450E2009	18" RCP Flared End, Install	8	Each
450E2028	36" RCP Flared End, Furnish	2	Each
450E2029	36" RCP Flared End, Install	2	Each
450E2036	48" RCP Flared End, Furnish	2	Each
450E2037	48" RCP Flared End, Install	2	Each
450E2040	54" RCP Flared End, Furnish	3	Each
450E2041	54" RCP Flared End, Install	3	Each
450E2200	24" RCP Sloped End, Furnish	7	Each
450E2201	24" RCP Sloped End, Install	7	Each
450E4768	24" CMP 14 Gauge, Furnish	30	Ft
450E4770	24" CMP, Install	30	Ft
450E5310	24" CMP Sloped End, Furnish	2	Each
450E5311	24" CMP Sloped End, Install	2	Each
* 450E8900	Cleanout Pipe Culvert	16	Each
450E9000	Reset Pipe	392	Ft
450E9001	Reset Pipe End Section	40	Each
462E0250	Cellular Grout	164.4	CuYd
620E0020	Type 2 Right-of-Way Fence	61	Ft
620E0520	Type 2 Temporary Fence	140	Ft

\* - Denotes Non-Participating

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
620E1020	2 Post Panel	2	Each
630E0500	Type 1 MGS	650.0	Ft
630E1500	Type 1 Guardrail Transition	10	Each
630E2017	MGS MASH Flared End Terminal	10	Each
632E2510	Type 2 Object Marker Back to Back	97	Each
700E0210	Class B Riprap	37.3	Ton
720E1010	PVC Coated Bank and Channel Protection Gabion	54.0	CuYd
831E0110	Type B Drainage Fabric	214	SqYd

\* - Denotes Non-Participating

## PCN 06RC – Section B – Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3210	Construction Staking	3.554	Mile
009E3230	Grade Staking	0.106	Mile
009E3250	Miscellaneous Staking	3.554	Mile
009E3280	Slope Staking	0.106	Mile
009E3301	Engineer Directed Surveying/Staking	25.0	Hour
009E4200	Construction Schedule, Category II	Lump Sum	LS
110E0500	Remove Pipe Culvert	226	Ft
110E0510	Remove Pipe End Section	7	Each
110E0600	Remove Fence	687	Ft
120E0010	Unclassified Excavation	18,143	CuYd
120E0600	Contractor Furnished Borrow	19,054	CuYd
120E6100	Water for Embankment	308.7	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
450E0143	24" RCP Class 3, Furnish	186	Ft
450E0150	24" RCP, Install	186	Ft
450E2200	24" RCP Sloped End, Furnish	4	Each
450E2201	24" RCP Sloped End, Install	4	Each
450E4768	24" CMP 14 Gauge, Furnish	50	Ft
450E4770	24" CMP, Install	50	Ft
450E5015	24" CMP Elbow, Furnish	4	Each
450E5016	24" CMP Elbow, Install	4	Each
450E5306	18" CMP Sloped End, Furnish	1	Each
450E5307	18" CMP Sloped End, Install	1	Each
450E5310	24" CMP Sloped End, Furnish	2	Each
450E5311	24" CMP Sloped End, Install	2	Each
450E8014	24" RCP to CMP Transition, Furnish	2	Each
450E8015	24" Pipe Transition, Install	2	Each
* 450E8900	Cleanout Pipe Culvert	5	Each
620E0020	Type 2 Right-of-Way Fence	687	Ft
620E0520	Type 2 Temporary Fence	1,244	Ft
620E1020	2 Post Panel	8	Each
632E2510	Type 2 Object Marker Back to Back	18	Each
680E0224	4" PVC Outlet Pipe	100	Ft
680E0440	4" Slotted Corrugated Polyethylene Drainage Tubing	280	Ft
680E2000	Concrete Headwall for Underdrain	1	Each
680E2500	Porous Backfill	118.0	Ton
720E1010	PVC Coated Bank and Channel Protection Gabion	9.0	CuYd
831E0110	Type B Drainage Fabric	30	SqYd

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3210	Construction Staking	1.665	Mile
009E3250	Miscellaneous Staking	1.665	Mile
009E3301	Engineer Directed Surveying/Staking	25.0	Hour
009E4200	Construction Schedule, Category II	Lump Sum	LS
110E0135	Remove Delineator	5	Each
110E0510	Remove Pipe End Section	1	Each
110E0600	Remove Fence	88	Ft
110E7500	Remove Pipe for Reset	40	Ft
110E7510	Remove Pipe End Section for Reset	3	Each
250E0020	Incidental Work, Grading	Lump Sum	LS
450E2028	36" RCP Flared End, Furnish	1	Each
450E2029	36" RCP Flared End, Install	1	Each
450E8300	Culvert Joint Cleaning	198.0	Ft
450E8305	Repair Culvert Joint	198.0	Ft
450E8310	Chemical Grout Void Fill	12.0	Gal
* 450E8900	Cleanout Pipe Culvert	9	Each
450E9000	Reset Pipe	40	Ft
450E9001	Reset Pipe End Section	3	Each
620E0020	Type 2 Right-of-Way Fence	88	Ft
620E0520	Type 2 Temporary Fence	312	Ft
620E1020	2 Post Panel	4	Each
632E2510	Type 2 Object Marker Back to Back	30	Each

\* - Denotes Non-Participating

### INDEX OF SHEETS

A1 to A6      Estimate of Quantities for Sections B, C, D, F, M, and S  
A6 to A8      Environmental Commitments

## PCN 06EO – Section B – Grading



FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0012(230)171...+	A2	A8

Revised: 10/24/24 pk

PCN 06A1 – Section B – Grading

PCN 06A1 – Section C – Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3210	Construction Staking	6.859	Mile
009E3230	Grade Staking	0.316	Mile
009E3250	Miscellaneous Staking	6.859	Mile
009E3280	Slope Staking	0.316	Mile
009E3301	Engineer Directed Surveying/Staking	25.0	Hour
009E4200	Construction Schedule, Category II	Lump Sum	LS
110E0135	Remove Delineator	4	Each
110E0500	Remove Pipe Culvert	82	Ft
110E0510	Remove Pipe End Section	11	Each
110E0600	Remove Fence	88	Ft
110E0730	Remove Beam Guardrail	1,040.0	Ft
110E7510	Remove Pipe End Section for Reset	1	Each
120E0010	Unclassified Excavation	13,054	CuYd
120E0600	Contractor Furnished Borrow	10,035	CuYd
120E2000	Undercutting	6,252	CuYd
120E6100	Water for Embankment	149.4	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
270E0112	Salvage Granular Material	1,313.0	Ton
450E0143	24" RCP Class 3, Furnish	60	Ft
450E0150	24" RCP, Install	60	Ft
450E0183	36" RCP Class 3, Furnish	100	Ft
450E0190	36" RCP, Install	100	Ft
450E2028	36" RCP Flared End, Furnish	4	Each
450E2029	36" RCP Flared End, Install	4	Each
450E2200	24" RCP Sloped End, Furnish	3	Each
450E2201	24" RCP Sloped End, Install	3	Each
450E4600	24" RCP Arch Sloped End, Furnish	1	Each
450E4601	24" RCP Arch Sloped End, Install	1	Each
450E4758	18" CMP 14 Gauge, Furnish	64	Ft
450E4760	18" CMP, Install	64	Ft
450E5310	24" CMP Sloped End, Furnish	5	Each
450E5311	24" CMP Sloped End, Install	5	Each
450E5406	18" CMP Safety End, Furnish	2	Each
450E5407	18" CMP Safety End, Install	2	Each
450E8300	Culvert Joint Cleaning	240.0	Ft
450E8305	Repair Culvert Joint	240.0	Ft
450E8310	Chemical Grout Void Fill	12.0	Gal
* 450E8900	Cleanout Pipe Culvert	22	Each
450E9001	Reset Pipe End Section	1	Each
462E0250	Cellular Grout	30.2	CuYd
464E0100	Controlled Density Fill	17.2	CuYd
620E0020	Type 2 Right-of-Way Fence	88	Ft

\* - Denotes Non-Participating

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
620E0520	Type 2 Temporary Fence	233	Ft
620E1020	2 Post Panel	4	Each
630E0500	Type 1 MGS	300.0	Ft
630E1500	Type 1 Guardrail Transition	12	Each
630E2017	MGS MASH Flared End Terminal	12	Each
632E2510	Type 2 Object Marker Back to Back	53	Each
720E1010	PVC Coated Bank and Channel Protection Gabion	16.5	CuYd
831E0110	Type B Drainage Fabric	53	SqYd
831E1010	Geogrid Reinforcement	4,034	SqYd

\* - Denotes Non-Participating

PCN 07CD – Section B – Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3210	Construction Staking	3.731	Mile
009E3250	Miscellaneous Staking	0.100	Mile
009E3301	Engineer Directed Surveying/Staking	25.0	Hour
009E4200	Construction Schedule, Category II	Lump Sum	LS
110E0730	Remove Beam Guardrail	910.0	Ft
120E0600	Contractor Furnished Borrow	140	CuYd
250E0020	Incidental Work, Grading	Lump Sum	LS
* 450E8900	Cleanout Pipe Culvert	8	Each
630E0500	Type 1 MGS	362.5	Ft
630E1500	Type 1 Guardrail Transition	8	Each
630E2017	MGS MASH Flared End Terminal	8	Each
632E2510	Type 2 Object Marker Back to Back	12	Each

\* - Denotes Non-Participating

PCN 05TY – Section C – Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	3,600.0	Hour
634E0020	Pilot Car	1,550.0	Hour
634E0110	Traffic Control Signs	761.9	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	1	Each
634E0630	Temporary Pavement Marking	73.1	Mile

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
260E1030	Base Course, Salvaged	200.0	Ton
634E0010	Flagging	225.0	Hour
634E0020	Pilot Car	100.0	Hour
634E0110	Traffic Control Signs	567.7	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	1	Each
634E0380	Tubular Marker	12	Each
634E0630	Temporary Pavement Marking	27.4	Mile
634E1002	Detour and Restriction Signing	300.0	SqFt
634E1215	Contractor Furnished Portable Changeable Message Sign	2	Each

PCN 06RC – Section C – Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	120.0	Hour
634E0020	Pilot Car	55.0	Hour
634E0110	Traffic Control Signs	434.1	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	1	Each
634E0630	Temporary Pavement Marking	14.7	Mile

PCN 06EO – Section C – Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	70.0	Hour
634E0020	Pilot Car	30.0	Hour
634E0110	Traffic Control Signs	418.1	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0630	Temporary Pavement Marking	6.6	Mile

PCN 07CD – Section C – Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	160.0	Hour
634E0020	Pilot Car	70.0	Hour
634E0110	Traffic Control Signs	518.6	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0630	Temporary Pavement Marking	3.0	Mile





PCN 05TY – Section D – Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1700	Remove Silt Fence	722	Ft
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0210	Type F Permanent Seed Mixture	783	Lb
731E0200	Fertilizing	22.60	Ton
732E0100	Mulching	45.2	Ton
734E0103	Type 3 Erosion Control Blanket	4,298	SqYd
734E0154	12" Diameter Erosion Control Wattle	1,148	Ft
734E0165	Remove and Reset Erosion Control Wattle	287	Ft
734E0510	Shaping for Erosion Control Blanket	2,214	Ft
734E0604	High Flow Silt Fence	2,889	Ft
734E0610	Mucking Silt Fence	201	CuYd
734E0620	Repair Silt Fence	722	Ft

PCN 06A1 – Section D – Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1700	Remove Silt Fence	241	Ft
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0210	Type F Permanent Seed Mixture	756	Lb
731E0200	Fertilizing	21.81	Ton
732E0100	Mulching	43.6	Ton
734E0103	Type 3 Erosion Control Blanket	329	SqYd
734E0154	12" Diameter Erosion Control Wattle	1,401	Ft
734E0165	Remove and Reset Erosion Control Wattle	350	Ft
734E0510	Shaping for Erosion Control Blanket	167	Ft
734E0604	High Flow Silt Fence	962	Ft
734E0610	Mucking Silt Fence	32	CuYd
734E0620	Repair Silt Fence	241	Ft

PCN 06RC – Section D – Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1700	Remove Silt Fence	350	Ft
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0210	Type F Permanent Seed Mixture	477	Lb
731E0200	Fertilizing	17.90	Ton
732E0100	Mulching	35.7	Ton
734E0103	Type 3 Erosion Control Blanket	421	SqYd
734E0154	12" Diameter Erosion Control Wattle	2,832	Ft
734E0165	Remove and Reset Erosion Control Wattle	708	Ft
734E0510	Shaping for Erosion Control Blanket	153	Ft
734E0604	High Flow Silt Fence	1,401	Ft
734E0610	Mucking Silt Fence	97	CuYd
734E0620	Repair Silt Fence	350	Ft

PCN 06EO – Section D – Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0210	Type F Permanent Seed Mixture	168	Lb
731E0200	Fertilizing	4.84	Ton
732E0100	Mulching	9.7	Ton

PCN 07CD – Section D – Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0210	Type F Permanent Seed Mixture	192	Lb
731E0200	Fertilizing	5.54	Ton
732E0100	Mulching	11.1	Ton
734E0154	12" Diameter Erosion Control Wattle	650	Ft
734E0165	Remove and Reset Erosion Control Wattle	163	Ft

PCN 05TY – Section F – Surfacing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3320	Checker	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement	869.0	SqYd
120E0100	Unclassified Excavation, Digouts	579	CuYd
120E6100	Water for Embankment	36.0	MGal
120E6200	Water for Granular Material	50.4	MGal
210E3510	Heavy Roadway Shaping	5,000.0	SqYd
260E1010	Base Course	3,395.4	Ton
260E1030	Base Course, Salvaged	745.0	Ton
260E6000	Granular Material, Furnish	65,744.3	Ton
270E0220	Blend and Stockpile Granular Material	745.0	Ton
280E0010	Full Depth Reclamation	384,421	SqYd
320E1200	Asphalt Concrete Composite	289.7	Ton
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	24.8	Mile
320E7028	Grind Centerline Rumble Stripe in Asphalt Concrete	12.4	Mile
330E0010	MC-70 Asphalt for Prime	268.1	Ton
330E0100	SS-1h or CSS-1h Asphalt for Tack	207.4	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	70.7	Ton
330E1000	Blotting Sand for Prime	1,707.6	Ton
330E2000	Sand for Flush Seal	870.4	Ton
332E0010	Cold Milling Asphalt Concrete	368,382	SqYd
600E0300	Type III Field Laboratory	1	Each

Alternate A

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 260E6000	Granular Material, Furnish	38,606.6	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	77,213.2	Ton
320E0005	PG 58-34 Asphalt Binder	3,480.7	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	76,423.6	Ton
320E4000	Hydrated Lime	760.6	Ton

\* - Denotes Non-Participating

Alternate B

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 260E6000	Granular Material, Furnish	38,280.4	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	76,200.4	Ton
320E0005	PG 58-34 Asphalt Binder	2,872.7	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	78,429.2	Ton
320E4000	Hydrated Lime	773.0	Ton

\* - Denotes Non-Participating



# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0012(230)171...+	A4	A8

Revised 11-18-24: EJW

## PCN 05TY – Section B – Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3210	Construction Staking	15.015	Mile
009E3240	Graded Centerline Staking	15.015	Mile
009E3250	Miscellaneous Staking	15.015	Mile
009E3280	Slope Staking	0.528	Mile
009E3301	Engineer Directed Surveying/Staking	50.0	Hour
009E4200	Construction Schedule, Category II	Lump Sum	LS
110E0135	Remove Delineator	7	Each
110E0500	Remove Pipe Culvert	46	Ft
110E0510	Remove Pipe End Section	19	Each
110E0595	Remove Cattle Pass End Section	6	Each
110E0600	Remove Fence	61	Ft
110E0730	Remove Beam Guardrail	1,400.0	Ft
110E7500	Remove Pipe for Reset	392	Ft
110E7510	Remove Pipe End Section for Reset	40	Each
120E0600	Contractor Furnished Borrow	16,432	CuYd
120E6100	Water for Embankment	249.2	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
450E0143	24" RCP Class 3, Furnish	8	Ft
450E0150	24" RCP, Install	8	Ft
450E0203	48" RCP Class 3, Furnish	8	Ft
450E0210	48" RCP, Install	8	Ft
450E0213	54" RCP Class 3, Furnish	8	Ft
450E0220	54" RCP, Install	8	Ft
450E2008	18" RCP Flared End, Furnish	8	Each
450E2009	18" RCP Flared End, Install	8	Each
450E2028	36" RCP Flared End, Furnish	2	Each
450E2029	36" RCP Flared End, Install	2	Each
450E2036	48" RCP Flared End, Furnish	2	Each
450E2037	48" RCP Flared End, Install	2	Each
450E2040	54" RCP Flared End, Furnish	3	Each
450E2041	54" RCP Flared End, Install	3	Each
450E2200	24" RCP Sloped End, Furnish	7	Each
450E2201	24" RCP Sloped End, Install	7	Each
450E4768	24" CMP 14 Gauge, Furnish	30	Ft
450E4770	24" CMP, Install	30	Ft
450E5310	24" CMP Sloped End, Furnish	2	Each
450E5311	24" CMP Sloped End, Install	2	Each
* 450E8900	Cleanout Pipe Culvert	16	Each
450E9000	Reset Pipe	392	Ft
450E9001	Reset Pipe End Section	40	Each
462E0250	Cellular Grout	164.4	CuYd
620E0020	Type 2 Right-of-Way Fence	61	Ft

\* - Denotes Non-Participating

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
620E0520	Type 2 Temporary Fence	140	Ft
620E1020	2 Post Panel	2	Each
630E0500	Type 1 MGS	650.0	Ft
630E1500	Type 1 Guardrail Transition	10	Each
630E2017	MGS MASH Flared End Terminal	10	Each
632E2510	Type 2 Object Marker Back to Back	97	Each
700E0210	Class B Riprap	37.3	Ton
720E1010	PVC Coated Bank and Channel Protection Gabion	54.0	CuYd
831E0110	Type B Drainage Fabric	214	SqYd

\* - Denotes Non-Participating

## PCN 06EO – Section B – Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3210	Construction Staking	1.665	Mile
009E3250	Miscellaneous Staking	1.665	Mile
009E3301	Engineer Directed Surveying/Staking	25.0	Hour
110E0135	Remove Delineator	5	Each
110E0510	Remove Pipe End Section	1	Each
110E0600	Remove Fence	88	Ft
110E7500	Remove Pipe for Reset	40	Ft
110E7510	Remove Pipe End Section for Reset	3	Each
250E0020	Incidental Work, Grading	Lump Sum	LS
450E2028	36" RCP Flared End, Furnish	1	Each
450E2029	36" RCP Flared End, Install	1	Each
450E8300	Culvert Joint Cleaning	198.0	Ft
450E8305	Repair Culvert Joint	198.0	Ft
450E8310	Chemical Grout Void Fill	12.0	Gal
* 450E8900	Cleanout Pipe Culvert	9	Each
450E9000	Reset Pipe	40	Ft
450E9001	Reset Pipe End Section	3	Each
620E0020	Type 2 Right-of-Way Fence	88	Ft
620E0520	Type 2 Temporary Fence	312	Ft
620E1020	2 Post Panel	4	Each
632E2510	Type 2 Object Marker Back to Back	30	Each

\* - Denotes Non-Participating



### INDEX OF SHEETS

A1 to A6 Estimate of Quantities for Sections B, C, D, F, M, and S  
A6 to A8 Environmental Commitments

## PCN 06RC – Section B – Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3210	Construction Staking	3.554	Mile
009E3230	Grade Staking	0.106	Mile
009E3250	Miscellaneous Staking	3.554	Mile
009E3280	Slope Staking	0.106	Mile
009E3301	Engineer Directed Surveying/Staking	25.0	Hour
110E0500	Remove Pipe Culvert	226	Ft
110E0510	Remove Pipe End Section	7	Each
110E0600	Remove Fence	687	Ft
120E0010	Unclassified Excavation	18,143	CuYd
120E0600	Contractor Furnished Borrow	19,054	CuYd
120E6100	Water for Embankment	308.7	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
450E0143	24" RCP Class 3, Furnish	186	Ft
450E0150	24" RCP, Install	186	Ft
450E2200	24" RCP Sloped End, Furnish	4	Each
450E2201	24" RCP Sloped End, Install	4	Each
450E4768	24" CMP 14 Gauge, Furnish	50	Ft
450E4770	24" CMP, Install	50	Ft
450E5015	24" CMP Elbow, Furnish	4	Each
450E5016	24" CMP Elbow, Install	4	Each
450E5306	18" CMP Sloped End, Furnish	1	Each
450E5307	18" CMP Sloped End, Install	1	Each
450E5310	24" CMP Sloped End, Furnish	2	Each
450E5311	24" CMP Sloped End, Install	2	Each
450E8014	24" RCP to CMP Transition, Furnish	2	Each
450E8015	24" Pipe Transition, Install	2	Each
* 450E8900	Cleanout Pipe Culvert	5	Each
620E0020	Type 2 Right-of-Way Fence	687	Ft
620E0520	Type 2 Temporary Fence	1,244	Ft
620E1020	2 Post Panel	8	Each
632E2510	Type 2 Object Marker Back to Back	18	Each
680E0224	4" PVC Outlet Pipe	100	Ft
680E0440	4" Slotted Corrugated Polyethylene Drainage Tubing	280	Ft
680E2000	Concrete Headwall for Underdrain	1	Each
680E2500	Porous Backfill	118.0	Ton
720E1010	PVC Coated Bank and Channel Protection Gabion	9.0	CuYd
831E0110	Type B Drainage Fabric	30	SqYd

\* - Denotes Non-Participating



FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0012(230)171...+	A4	A8

Revised: 7/24/24 - EJW

PCN 06A1 – Section F – Surfacing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3320	Checker	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement	5,992.3	SqYd
120E0100	Unclassified Excavation, Digsouts	343	CuYd
260E1010	Base Course	5,657.7	Ton
260E1030	Base Course, Salvaged	725.0	Ton
260E6000	Granular Material, Furnish	362.5	Ton
270E0220	Blend and Stockpile Granular Material	725.0	Ton
320E1200	Asphalt Concrete Composite	1,321.8	Ton
320E1800	Asphalt Concrete Blade Laid	1,029.1	Ton
320E7008	Grind 8" Rumble Strip or Stripe in Asphalt Concrete	13.7	Mile
320E7028	Grind Centerline Rumble Stripe in Asphalt Concrete	6.9	Mile
330E0100	SS-1h or CSS-1h Asphalt for Tack	76.0	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	23.9	Ton
330E1000	Blotting Sand for Prime	10.0	Ton
330E2000	Sand for Flush Seal	355.0	Ton
332E0010	Cold Milling Asphalt Concrete	100,700	SqYd
900E1980	Storage Unit	1	Each

Alternate A

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 260E6000	Granular Material, Furnish	2,880.8	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	5,761.6	Ton
320E0005	PG 58-34 Asphalt Binder	664.7	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	12,934.3	Ton
320E4000	Hydrated Lime	141.3	Ton

\* - Denotes Non-Participating

Alternate B

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 260E6000	Granular Material, Furnish	2,805.7	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	5,611.5	Ton
320E0005	PG 58-34 Asphalt Binder	562.4	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	13,235.5	Ton
320E4000	Hydrated Lime	141.6	Ton

\* - Denotes Non-Participating

PCN 06RC – Section F – Surfacing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3320	Checker	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement	712.9	SqYd
120E0100	Unclassified Excavation, Digsouts	178	CuYd
260E1010	Base Course	917.8	Ton
260E1030	Base Course, Salvaged	195.0	Ton
260E6000	Granular Material, Furnish	97.5	Ton
270E0220	Blend and Stockpile Granular Material	195.0	Ton
320E1200	Asphalt Concrete Composite	182.6	Ton
320E1800	Asphalt Concrete Blade Laid	531.5	Ton
320E7008	Grind 8" Rumble Strip or Stripe in Asphalt Concrete	7.1	Mile
330E0100	SS-1h or CSS-1h Asphalt for Tack	36.7	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	11.3	Ton
330E2000	Sand for Flush Seal	166.5	Ton
332E0010	Cold Milling Asphalt Concrete	48,912	SqYd

Alternate A

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 260E6000	Granular Material, Furnish	1,297.3	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	2,594.6	Ton
320E0005	PG 58-34 Asphalt Binder	306.6	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	5,874.4	Ton
320E4000	Hydrated Lime	62.7	Ton

\* - Denotes Non-Participating

Alternate B

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 260E6000	Granular Material, Furnish	1,261.9	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	2,523.8	Ton
320E0005	PG 58-34 Asphalt Binder	260.3	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	6,023.2	Ton
320E4000	Hydrated Lime	66.3	Ton

\* - Denotes Non-Participating

PCN 06EO – Section F – Surfacing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3320	Checker	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement	125.0	SqYd
120E0100	Unclassified Excavation, Digsouts	83	CuYd
260E1010	Base Course	166.5	Ton
260E1030	Base Course, Salvaged	135.0	Ton
260E6000	Granular Material, Furnish	67.5	Ton
270E0220	Blend and Stockpile Granular Material	135.0	Ton
320E1200	Asphalt Concrete Composite	41.6	Ton
320E1800	Asphalt Concrete Blade Laid	249.8	Ton
320E7008	Grind 8" Rumble Strip or Stripe in Asphalt Concrete	3.3	Mile
330E0100	SS-1h or CSS-1h Asphalt for Tack	20.9	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	5.9	Ton
330E2000	Sand for Flush Seal	86.6	Ton
332E0010	Cold Milling Asphalt Concrete	28,620	SqYd

Alternate A

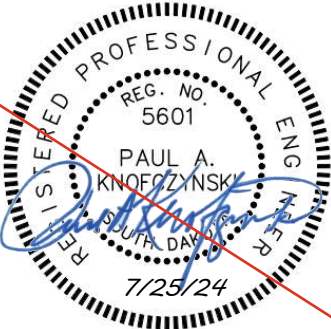
BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 260E6000	Granular Material, Furnish	848.9	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	1,697.8	Ton
320E0005	PG 58-34 Asphalt Binder	170.7	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	3,348.4	Ton
320E4000	Hydrated Lime	36.3	Ton

\* - Denotes Non-Participating

Alternate B

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 260E6000	Granular Material, Furnish	829.9	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	1,659.8	Ton
320E0005	PG 58-34 Asphalt Binder	144.2	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	3,423.9	Ton
320E4000	Hydrated Lime	36.4	Ton

\* - Denotes Non-Participating





PCN 07CD – Section F – Surfacing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3320	Checker	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement	140.0	SqYd
120E0100	Unclassified Excavation, Digouts	93	CuYd
260E1010	Base Course	273.1	Ton
260E1030	Base Course, Salvaged	545.0	Ton
260E6000	Granular Material, Furnish	272.5	Ton
270E0220	Blend and Stockpile Granular Material	545.0	Ton
320E1200	Asphalt Concrete Composite	46.7	Ton
320E1800	Asphalt Concrete Blade Laid	242.6	Ton
320E7008	Grind 8" Rumble Strip or Stripe in Asphalt Concrete	3.7	Mile
320E7028	Grind Centerline Rumble Stripe in Asphalt Concrete	1.9	Mile
330E0100	SS-1h or CSS-1h Asphalt for Tack	26.8	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	7.9	Ton
330E2000	Sand for Flush Seal	100.0	Ton
332E0010	Cold Milling Asphalt Concrete	44,542	SqYd

Alternate A

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 260E6000	Granular Material, Furnish	1,385.4	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	2,770.8	Ton
320E0005	PG 58-34 Asphalt Binder	249.9	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	5,048.7	Ton
320E4000	Hydrated Lime	53.4	Ton

\* - Denotes Non-Participating

Alternate B

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 260E6000	Granular Material, Furnish	1,358.8	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	2,717.6	Ton
320E0005	PG 58-34 Asphalt Binder	209.9	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	5,155.3	Ton
320E4000	Hydrated Lime	53.4	Ton

\* - Denotes Non-Participating

PCN 05TY – Section M – Pavement Marking

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E0010	Cold Applied Plastic Pavement Marking, 4"	25,423	Ft
633E0030	Cold Applied Plastic Pavement Marking, 24"	526	Ft
633E0035	Cold Applied Plastic Pavement Marking, Area	40	SqFt
633E0040	Cold Applied Plastic Pavement Marking, Arrow	14	Each
633E1200	High Build Waterborne Pavement Marking Paint, White	646	Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	294	Gal
633E5000	Grooving for Cold Applied Plastic Pavement Marking, 4"	25,423	Ft
633E5015	Grooving for Cold Applied Plastic Pavement Marking, 24"	526	Ft
633E5020	Grooving for Cold Applied Plastic Pavement Marking, Area	40	SqFt
633E5025	Grooving for Cold Applied Plastic Pavement Marking, Arrow	14	Each

PCN 06A1 – Section M – Pavement Marking

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1200	High Build Waterborne Pavement Marking Paint, White	428	Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	159	Gal

PCN 06RC – Section M – Pavement Marking

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1200	High Build Waterborne Pavement Marking Paint, White	198	Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	141	Gal

PCN 06EO – Section M – Pavement Marking

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1200	High Build Waterborne Pavement Marking Paint, White	92	Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	55	Gal

PCN 07CD – Section M – Pavement Marking

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1200	High Build Waterborne Pavement Marking Paint, White	107	Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	58	Gal



PCN 05TY – Section S – Permanent Signing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E7150	Remove Sign for Reset	22	Each
110E7152	Remove Delineator for Reset	300	Each
632E2022	4"x4" White Delineator Back to Back with 1.12 Lb/Ft Post	10	Each
632E2024	4"x8" White Delineator with 1.12 Lb/Ft Post	31	Each
632E2028	4" Tubular White Delineator with 1.12 Lb/Ft Post	26	Each
632E2100	Reset Delineator	300	Each
632E2220	Guardrail Delineator	56	Each
632E3500	Reset Sign	22	Each

PCN 06A1 – Section S – Permanent Signing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E7150	Remove Sign for Reset	4	Each
110E7152	Remove Delineator for Reset	150	Each
632E2100	Reset Delineator	150	Each
632E2220	Guardrail Delineator	48	Each
632E3500	Reset Sign	4	Each

PCN 06RC – Section S – Permanent Signing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E7150	Remove Sign for Reset	2	Each
110E7152	Remove Delineator for Reset	3	Each
632E2100	Reset Delineator	3	Each
632E3500	Reset Sign	2	Each

PCN 06EO – Section S – Permanent Signing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E7152	Remove Delineator for Reset	40	Each
632E2100	Reset Delineator	40	Each

PCN 07CD – Section S – Permanent Signing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E7150	Remove Sign for Reset	3	Each
110E7152	Remove Delineator for Reset	45	Each
632E2100	Reset Delineator	45	Each
632E2220	Guardrail Delineator	32	Each
632E3500	Reset Sign	3	Each

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 A: AQUATIC RESOURCES

COMMITMENT A1: WETLANDS

All efforts to avoid and minimize wetland impacts from the project have resulted in approximately 0.047 acres 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	Perm. Impact Left (Acres)	Perm. Impact Right (Acres)	Temp. Impact Left (Acres)	Temp. Impact Right (Acres)	Total Impact (Acres)
1	846+51	0.013	0.010	0.010	0.000	0.033
4	751+96	0.014	0.000	0.000	0.000	0.014

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 0.04 acres 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 as designated in project plans. 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 A2: STREAMS

All efforts to avoid and minimize stream impacts from the project have resulted in approximately 0.04 acres of stream (includes temporary and permanent) becoming impacted. Refer to plans for location and boundaries of the impacted streams.

Table of Impacted Streams

Stream Name	Station	Perm. Impact (Acres)	Temp. Impact (Acres)	Total Impact (Acres)
S-I4	752+00	0.02	0.00	0.02
S-I2b	25+00	0.02	0.00	0.02

Action Taken/Required:

It has been determined that project impacts do not require mitigation. Temporary impacts identified in the Table of Impacted Streams will not be mitigated as the finished ground under the bridge will be shaped to match the upstream channel and flood plain and the existing low water channel will be maintained as near as practical to the existing location.





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**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 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**

The Grand River is classified as a warm water permanent fishery with a total suspended solids standard of less than 90 mg/L 30-day average, less than 158 mg/L daily maximum.

The Missouri River is classified as a cold water permanent fishery with a total suspended solids standard of less than 30 mg/L 30-day average, less than 53 mg/L daily maximum.

The Grand River and Missouri River are classified as fish and wildlife propagation, recreation, irrigation, and stock watering waters. Because of these beneficial uses, special construction measures may have to be taken to ensure that this water body is not impacted.

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\\_AddTemplInfoFillable.pdf](https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_AddTemplInfoFillable.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”.



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**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 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 Tribal Historic Preservation Office (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 appropriate SHPO/THPO. Allow **30 Days** from the date this information is submitted to the Environmental Engineer for SHPO/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 appropriate SHPO/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 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 is maintained on-site.

