

STATE OF SOUTH DAKOTA  
 DEPARTMENT OF TRANSPORTATION  
 PLANS FOR PROPOSED

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 0047(113)42	1	170

Plotting Date: 08-27-2024 REV DATE: INITIAL:

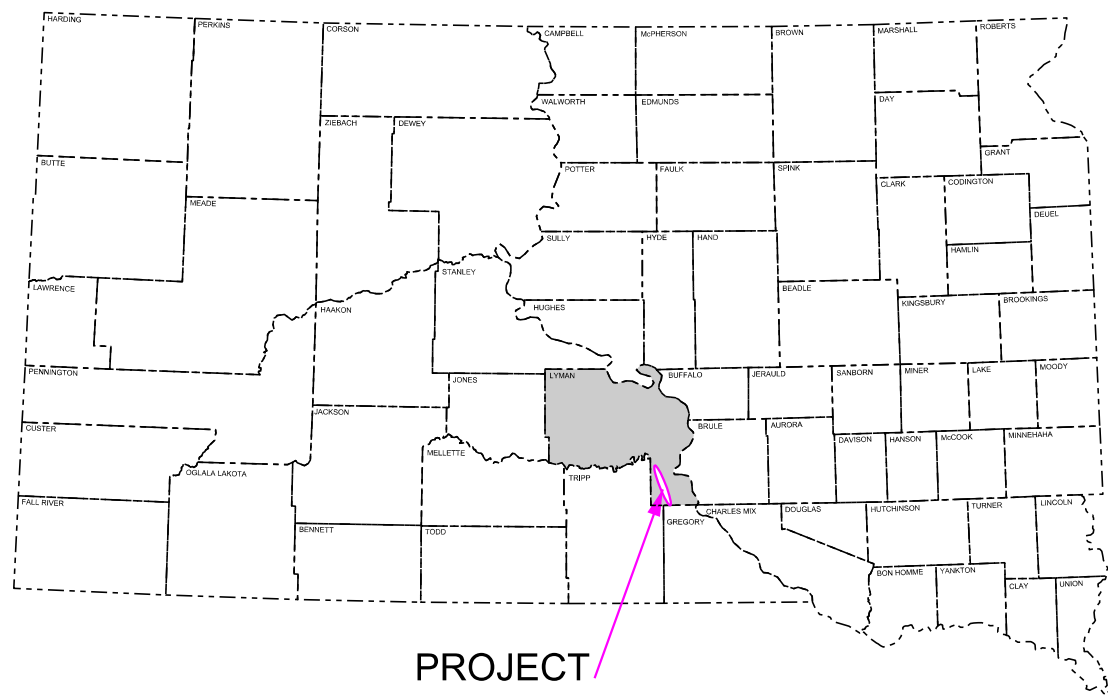
# PROJECT P 0047(113)42 S.D. HIGHWAY 47 LYMAN COUNTY

COLD MILLING ASPHALT CONCRETE, ASPHALT CONCRETE,  
 RESURFACING, PIPE WORK, REPLACE STRUCTURES (RCBC) & ROW

PCN 05UN

## INDEX OF SECTIONS

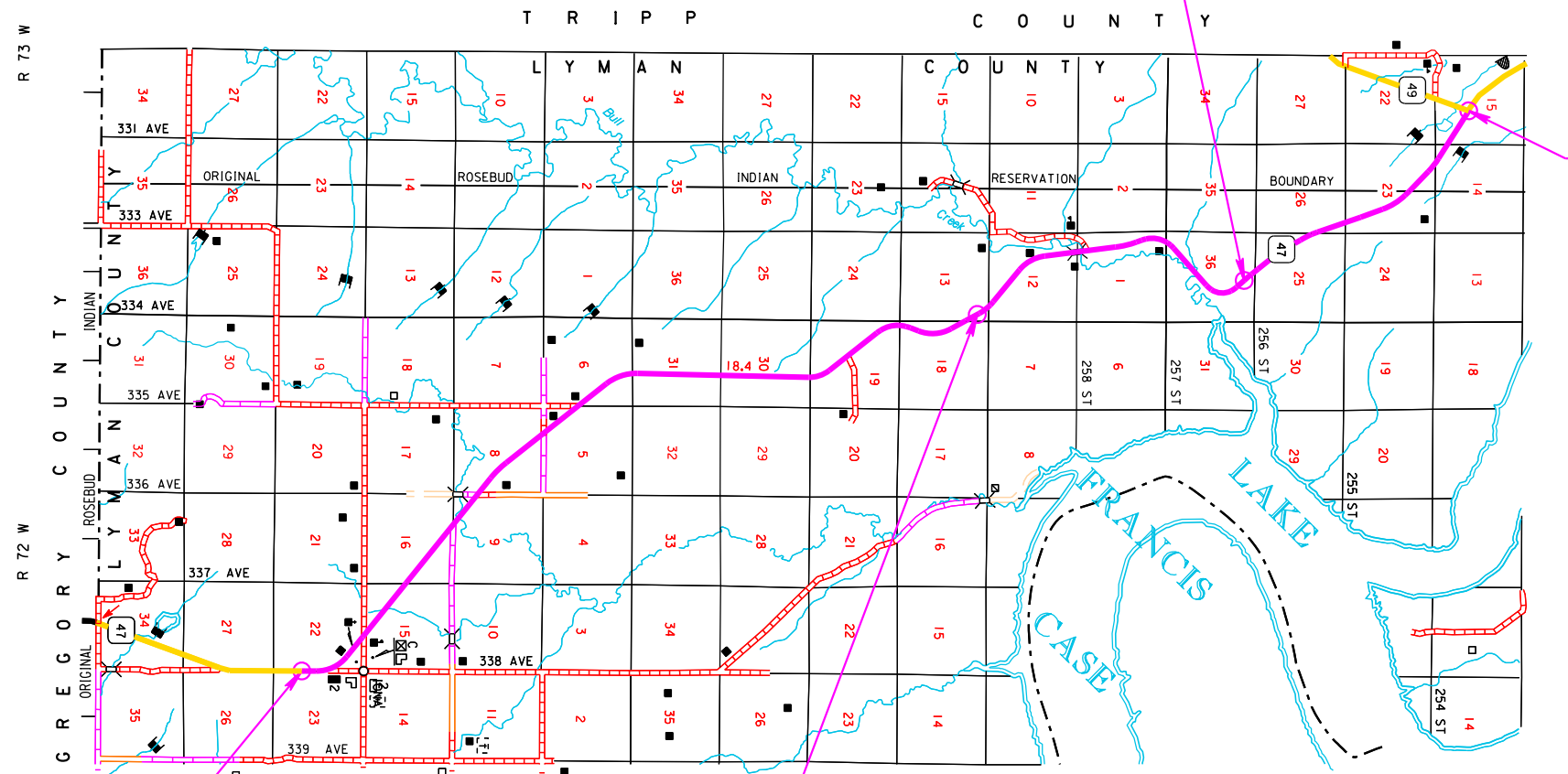
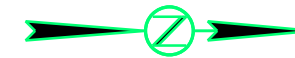
- Section A: Estimate of Quantities & Environmental Commitments
- Section B: Grading Plans
- Section C: Traffic Control Plans
- Section D: Erosion & Sediment Control Plans
- Section E: Structure Plans
- Section F: Surfacing Plans
- Section M: Pavement Marking Plans
- Section X: Cross Sections
- Section Z: Pipe Sections



PROJECT

### EQUATION

Station 677+72.41 Bk =  
 Station b 677+80.60 Ah



**BEGIN P 0047(113)42**  
 Station 505+75  
 Located 1,944.57' North and  
 2,019.34' West of the  
 southeast corner of Section  
 15 - Township 103 North -  
 Range 73 West of the 5th PM  
 MRM 58.00 + 0.039

**END P 0047(113)42**  
 Station c 1353+00  
 Located 1,482.63' North and 3' West  
 of the southeast corner of Section 22 -  
 Township 101 North - Range 72 West  
 of the 5th PM  
 MRM 41.00 + 0.996

**EQUATION**  
 Station b 867+53.83 Bk =  
 Station c 865+98.20 Ah

Gross Length	84873 Feet	16.07 Miles
Length of Exceptions	0 Feet	0 Miles
Net Length	84873 Feet	16.07 Miles

**DESIGN DESIGNATION**

AAADT (2020)	254
AAADT (2045)	452
DHV	53
D	50%
DHV T%	13.1%
AAADT T%	28.7%
V	65 mph

**STORM WATER PERMIT**  
 Major Receiving  
 Body of Water: Bull Creek, Waterhole Creek, Lake Francis Case  
 Area Disturbed: 87.80 ac  
 Total Project Area: 292.26 ac  
 Approx. Begin Lat,Long: Latitude=43°31'12" N, Longitude=99°25'31" W

# 9

January 22, 2025



Plot Scale - 1:200

Plotting Date:

Plotted From - BSCHOLTZ

File - ...101 Title.dgn

**SECTION B – GRADING**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
004E0030	Maintenance of Traffic Diversion(s)	Lump Sum	LS
004E0050	Remove Traffic Diversion(s)	Lump Sum	LS
009E0010	Mobilization	Lump Sum	LS
009E3200	Construction Staking	Lump Sum	LS
009E3301	Engineer Directed Surveying/Staking	40.0	Hour
009E4200	Construction Schedule, Category II	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
110E0500	Remove Pipe Culvert	1,070	Ft
110E0510	Remove Pipe End Section	46	Each
110E0600	Remove Fence	2,933	Ft
110E1010	Remove Asphalt Concrete Pavement	3,001.0	SqYd
110E7500	Remove Pipe for Reset	8	Ft
110E7510	Remove Pipe End Section for Reset	4	Each
120E0010	Unclassified Excavation	20,878	CuYd
120E0600	Contractor Furnished Borrow Excavation	13,000	CuYd
120E1000	Muck Excavation	1,000	CuYd
120E2000	Undercutting	742	CuYd
120E4100	Reprofiling Ditch	12.0	Sta
120E6100	Water for Embankment	156.0	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
260E3010	Gravel Surfacing	877.0	Ton
260E6000	Granular Material, Furnish	351.4	Ton
421E0100	Pipe Culvert Undercut	283	CuYd
430E0700	Precast Concrete Headwall for Drain	1	Each
450E0122	18" RCP Class 2, Furnish	152	Ft
450E0130	18" RCP, Install	152	Ft
450E0142	24" RCP Class 2, Furnish	246	Ft
450E0150	24" RCP, Install	246	Ft
450E0182	36" RCP Class 2, Furnish	16	Ft
450E0190	36" RCP, Install	16	Ft
450E0192	42" RCP Class 2, Furnish	8	Ft
450E0200	42" RCP, Install	8	Ft
450E0242	72" RCP Class 2, Furnish	200	Ft
450E0250	72" RCP, Install	200	Ft
450E2008	18" RCP Flared End, Furnish	25	Each
450E2009	18" RCP Flared End, Install	25	Each
450E2016	24" RCP Flared End, Furnish	3	Each
450E2017	24" RCP Flared End, Install	3	Each
450E2024	30" RCP Flared End, Furnish	4	Each
450E2025	30" RCP Flared End, Install	4	Each
450E2028	36" RCP Flared End, Furnish	2	Each
450E2029	36" RCP Flared End, Install	2	Each
450E2032	42" RCP Flared End, Furnish	1	Each

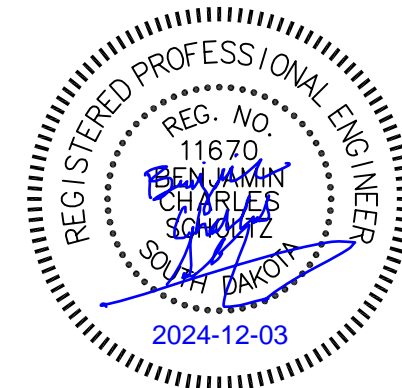
BID ITEM NUMBER	ITEM	QUANTITY	UNIT
450E2033	42" RCP Flared End, Install	1	Each
450E2052	72" RCP Flared End, Furnish	4	Each
450E2053	72" RCP Flared End, Install	4	Each
450E4520	48" RCP Arch Flared End, Furnish	2	Each
450E4521	48" RCP Arch Flared End, Install	2	Each
450E4699	Tie Bolts for RCP	364	Each
450E4768	24" CMP 14 Gauge, Furnish	66	Ft
450E4770	24" CMP, Install	66	Ft
450E5015	24" CMP Elbow, Furnish	1	Each
450E5016	24" CMP Elbow, Install	1	Each
450E5211	18" CMP Flared End, Furnish	1	Each
450E5212	18" CMP Flared End, Install	1	Each
450E5215	24" CMP Flared End, Furnish	3	Each
450E5216	24" CMP Flared End, Install	3	Each
450E5219	30" CMP Flared End, Furnish	2	Each
450E5220	30" CMP Flared End, Install	2	Each
450E7624	24" Steel Pipe, Furnish	212	Ft
450E7630	30" Steel Pipe, Furnish	192	Ft
450E8014	24" RCP to CMP Transition, Furnish	1	Each
450E8015	24" Pipe Transition, Install	1	Each
450E8300	Culvert Joint Cleaning	3,588.0	Ft
450E8305	Repair Culvert Joint	3,588.0	Ft
450E8310	Chemical Grout Void Fill	935.0	Gal
* 450E8900	Cleanout Pipe Culvert	10	Each
450E9000	Reset Pipe	8	Ft
450E9001	Reset Pipe End Section	4	Each
451E5124	Bore and Jack 24" Pipe	212	Ft
451E5130	Bore and Jack 30" Pipe	192	Ft
462E0250	Cellular Grout	35.9	CuYd
464E0100	Controlled Density Fill	58.0	CuYd
600E0300	Type III Field Laboratory	1	Each
620E0020	Type 2 Right-of-Way Fence	2,745	Ft
620E0515	Type 1A Temporary Fence	2,238	Ft
620E0520	Type 2 Temporary Fence	102	Ft
620E1020	2 Post Panel	35	Each
632E2510	Type 2 Object Marker Back to Back	66	Each
680E0204	4" Perforated PVC Drain Pipe with Sleeve	40	Ft
680E0224	4" PVC Outlet Pipe	10	Ft
680E2500	Porous Backfill	13.0	Ton
700E0210	Class B Riprap	1,615.5	Ton
720E1010	PVC Coated Bank and Channel Protection Gabion	15.0	CuYd
831E0110	Type B Drainage Fabric	7,929	SqYd
831E0300	Reinforcement Fabric (MSE)	461	SqYd

\* Denotes Non-Participating

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
831E0400	Impermeable Plastic Membrane	20	SqYd
831E1010	Geogrid Reinforcement	1,150	SqYd
900E1080	Orange Plastic Safety Fence	800	Ft

**SECTION C – TRAFFIC CONTROL**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	700.0	Hour
634E0020	Pilot Car	250.0	Hour
634E0110	Traffic Control Signs	711.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	9	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	14,616	Ft
634E0600	4" Temporary Pavement Marking Tape Type I	14,616	Ft
634E0630	Temporary Pavement Marking	80.0	Mile
634E1002	Detour and Restriction Signing	506.6	SqFt
634E1215	Contractor Furnished Portable Changeable Message Sign	4	Each



**INDEX OF SHEETS**

A1	to	A2	Estimate of Quantities for Section B, C, D, E, F, and M
A3	to	A6	Environmental Commitments

**SECTION D – EROSION CONTROL**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	21.5	CuYd
110E1693	Remove Erosion Control Wattle	2,006	Ft
110E1700	Remove Silt Fence	500	Ft
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0210	Type F Permanent Seed Mixture	546	Lb
732E0100	Mulching	50.0	Ton
734E0103	Type 3 Erosion Control Blanket	8,500	SqYd
734E0133	Type 3 Turf Reinforcement Mat	1,700.0	SqYd
734E0154	12" Diameter Erosion Control Wattle	8,000	Ft
734E0165	Remove and Reset Erosion Control Wattle	2,006	Ft
734E0510	Shaping for Erosion Control Blanket	690	Ft
734E0602	Low Flow Silt Fence	1,500	Ft
734E0604	High Flow Silt Fence	2,000	Ft
734E0610	Mucking Silt Fence	139	CuYd
734E0620	Repair Silt Fence	500	Ft
900E1320	Construction Entrance	4	Each

**SECTION E – STRUCTURES**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
420E0200	Structure Excavation, Box Culvert	102	CuYd
421E0200	Box Culvert Undercut	275	CuYd
460E0120	Class A45 Concrete, Box Culvert	151.2	CuYd
460E0380	Install Dowel in Concrete	18	Each
480E0100	Reinforcing Steel	22,072	Lb
560E0216	13'x8' Precast Concrete Box Culvert, Furnish	80.0	Ft
560E0217	13'x8' Precast Concrete Box Culvert, Install	80.0	Ft
560E1216	13'x8' Precast Concrete Box Culvert End Section, Furnish	2	Each
560E1217	13'x8' Precast Concrete Box Culvert End Section, Install	2	Each
700E0210	Class B Riprap	79.6	Ton
831E0110	Type B Drainage Fabric	104	SqYd
831E0300	Reinforcement Fabric (MSE)	239	SqYd

**SECTION F – SURFACING**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3320	Checker	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement	4,344.3	SqYd
120E0100	Unclassified Excavation, Digouts	803	CuYd
210E0100	Shoulder Clearing	32.1	Mile
260E1010	Base Course	6,638.8	Ton
320E1200	Asphalt Concrete Composite	1,050.8	Ton
320E1800	Asphalt Concrete Blade Laid	2,407.5	Ton
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	32.0	Mile
320E7028	Grind Centerline Rumble Stripe in Asphalt Concrete	16.0	Mile
330E0100	SS-1h or CSS-1h Asphalt for Tack	177.2	Ton
330E2000	Sand for Flush Seal	829.9	Ton
332E0010	Cold Milling Asphalt Concrete	285,508	SqYd
900E1980	Storage Unit	1	Each

**SECTION F – SURFACING, ALTERNATE A**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 260E6000	Granular Material, Furnish	10,215.4	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	20,430.8	Ton
320E0005	PG 58-34 Asphalt Binder	1,868.7	Ton
320E1202	Class Q2R Hot Mixed Asphalt Concrete	37,084.8	Ton
320E4000	Hydrated Lime	393.7	Ton

\* - Denotes Non-Participating

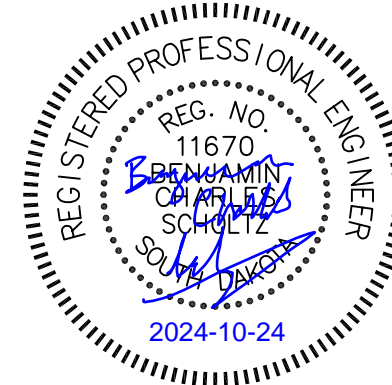
**SECTION F – SURFACING, ALTERNATE B**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 260E6000	Granular Material, Furnish	9,990.4	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	19,980.8	Ton
320E0005	PG 58-34 Asphalt Binder	1,566.6	Ton
320E1202	Class Q2R Hot Mixed Asphalt Concrete	37,968.7	Ton
320E4000	Hydrated Lime	393.7	Ton

\* - Denotes Non-Participating

**SECTION M – PAVEMENT MARKINGS**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1200	High Build Waterborne Pavement Marking Paint, White	722	Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	459	Gal
633E1262	High Build Waterborne Pavement Marking Paint, 24" Yellow	145	Ft
633E1272	High Build Waterborne Pavement Marking Paint, Arrow	4	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: WETLANDS**

All efforts to avoid and minimize wetland impacts from the project have resulted in approximately 0.27 acre(s) of wetlands (includes temporary and permanent) becoming impacted. Refer to Section B – Grading plans/plan sheets 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)
Wetland 2	593+00	0	0	0.01	0	0.01
Wetland 4	712+86	0.024	0.003	0.039	0.051	0.117
Wetland 6	909+50	0.001	0.003	0.014	0.013	0.031
Wetland 7	982+00	0	0.009	0.038	0.031	0.078
Wetland 8	999+00	0	0	0.02	0	0.02
Wetland 9	1122+63	0.002	0	0.013	0	0.015

**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 acre(s) 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 Section B – Grading Plans/plan sheets. 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 SDDOT Standard Specifications for Roads and Bridges.

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 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 shall 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 Bull Creek is classified as warm water, marginal fishery with a total suspended solids standard of less than 150 mg/L 30-day average, less than 263 mg/L daily maximum.

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 DANR General Permit for Stormwater Discharges Associated with Construction Activities is required for construction activity disturbing one or more acres of earth and work in a waterway. The SDDOT is the owner of this permit and will submit the NOI to DANR 15 days prior to project start in order to obtain coverage under the General Permit. Work can begin once the DANR letter of approval is received.

The Contractor must adhere to the "Special Provision Regarding Storm Water Discharges to Waters of the State."

The Contractor will complete the DANR Contractor Certification Form prior to the pre-construction meeting. The form certifies under penalty of law that the Contractor understands and will comply with the terms and conditions of the permit for this project. Work may not begin on this project until this form is signed and submitted to DANR.

The form can be found at: <[https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR\\_CGPAappendixCCA2018Fillable.pdf](https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_CGPAappendixCCA2018Fillable.pdf)>

The Contractor is advised that permit coverage may also be required for off-site activities, such as borrow and staging areas, which are the responsibility of the Contractor.

**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.

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	P 0047(113)42	A5	A6

**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 State Historic Preservation Office (SHPO) 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 100 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.

SHPO 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 J: CONSTRUCTION PRACTICES FOR TEMPORARY WORKS IN WATERWAYS OF THE U.S.**

The Contractor is advised that special construction measures must be taken to ensure that the waterways of the U.S. are not impacted.

**Action Taken/Required:**

Excavation will not occur below the ordinary high-water elevation in waterways outside of caissons, cribs, cofferdams, steel piling, or sheeting. The natural streambed will not be disturbed unless specified by the plans and under the observation of the Project Engineer. Refer to the Table of U.S. Waterways to Protect for ordinary high-water elevations. Any structure work over or within the waterway will be constructed according to Section 7.21 C of the Specifications.

All dredged or excavated materials will be placed at a site above the ordinary high-water elevation in a confined area (not classified as a wetland) that is a minimum of 50 feet away from concentrated flows of storm water, drainage courses, and inlets to prevent return of such material to the waterway.

The construction of temporary work platforms, crossings, or berms below the ordinary high-water elevation will be allowed if all material placed below the ordinary high-water elevation consists of Class B or larger riprap.

All temporary caissons, cribs, cofferdams, steel piling, sheeting, work platforms, crossings, and berms will be removed with minimal disturbance to the streambed. Proper construction practices will be used to minimize increases in suspended solids and turbidity in the waterway.

Bridge berms, wing dams, traffic diversions, channel reconstruction, stream diversions, grading, etc. will be constructed in close conformity with the plans to ensure that the hydraulic capacity of the waterway is not changed.

Temporary waterway crossings required for the Contractor's construction operations will be constructed with an adequate drainage structure size and minimum fill height to reduce the potential for upstream flooding. The Contractor will be responsible for sizing the temporary drainage structure for these crossings.

All temporary works in waterways of the US are required to be covered in the Corp of Engineers 404 Permit. At the time of the preconstruction meeting, the Contractor will submit documentation for all temporary works for the purpose of complying with the 404 Permit requirements in accordance with Section 423.3 A of the Specifications.

If an on-site construction crossing is used at Sta. 712+86 & 1122+63, the temporary crossing will need to be designed so it will not increase the Q<sub>100</sub> water surface elevation. The Contractor will submit the proposed temporary crossing geometric layout and structure size at Sta. 712+86 & 1122+63 to the Project Engineer during the preconstruction meeting. This information will be forwarded to the SDDOT Hydraulics Office and Environmental Office for review. Construction of the temporary crossing is not allowed until approval of the proposal is obtained from the SDDOT Hydraulics office and Environmental Office.

**COMMITMENT J: CONSTRUCTION PRACTICES FOR TEMPORARY WORKS IN WATERWAYS OF THE U.S., continued**

**Table of U.S. Waterways to Protect**

Station	Waterway	Ordinary High-Water Elevation
b712+68	Tributary to Bull Creek	1380.00
c1121+94	Tributary to Waterhole Creek	1742.10

Stream channel excavation within "Waters of the US" is subject to USACE regulatory jurisdiction. Stream channel excavation cannot exceed the permitted quantities and/or surface area. The 404 Permit is included in the Special Provisions.

The Contractor will take all precautions necessary to prevent any incidental discharges associated with the excavation and hauling of material from the stream channel. This pertains to any excavation operations such as, foundation, pier, or abutment excavation, channel cleanout, excavation for riprap protection, and removal of any temporary fill associated with construction activities.

**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.