

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-CR 0081(122)3 & P 0046(87)334	1	127

Plotting Date: 09/13/2024

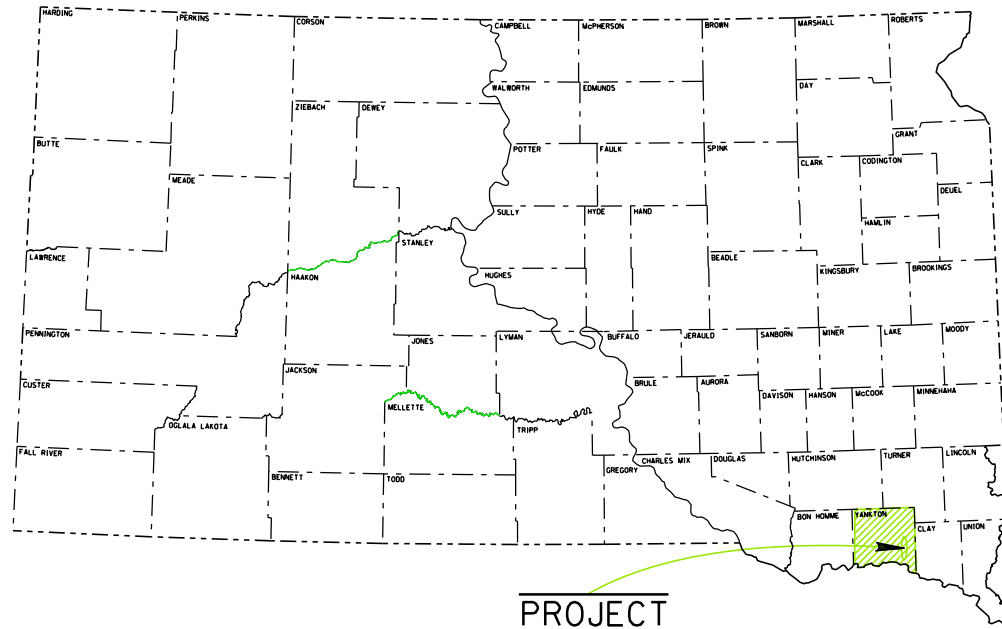
PLANS FOR PROPOSED
PROJECT
NH-CR 0081(122)3
P 0046(87)334
US HIGHWAY 81
SD HIGHWAY 46
YANKTON COUNTY

AC Resurfacing, PCC Surfacing, AC Surfacing,
Mill, AC Resurfacing of Shoulders
PCN 07V2, 09P4

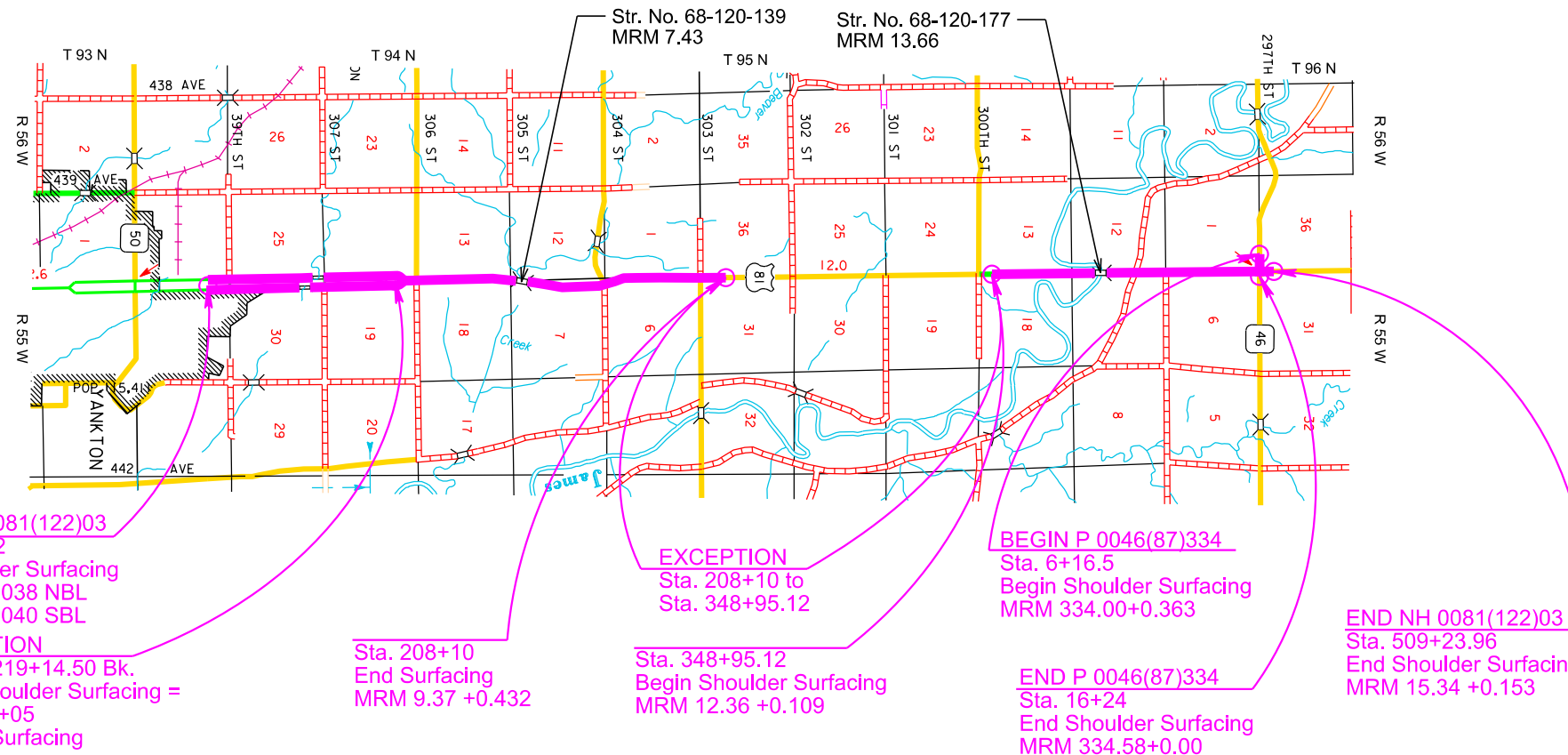
INDEX OF SECTIONS

Section A:	Estimate of Quantities and Environmental Commitments
Section C:	Traffic Control Plans
Section D:	Erosion and Sediment Control Plans
Section F:	Surfacing Plans
Section M:	Pavement Marking Plans
Section X:	Cross Sections

PLOT SCALE - 1"=9600'



PROJECT



DESIGN DESIGNATION (07V2)

ADT (2022)	3664
ADT (2042)	5511
DHV	636
D	51%
T DHV	6.9%
T ADT	15.2%
V	65 MPH

DESIGN DESIGNATION (09P4)

ADT (2022)	995
ADT (2042)	1496
DHV	173
D	51%
T DHV	5.6%
T ADT	12.2%
V	65 MPH

STORM WATER PERMIT 07V2

MAJOR STREAM - Tributaries to:
James River

ACRES DISTURBED - 34 Acres
PROJECT AREA - 249 Acres

LATITUDE = 43.6789 (Google Maps)
LONGITUDE = -97.3620 (Google Maps)

STORM WATER PERMIT 09P4

MAJOR STREAM - Tributaries to:
James River

ACRES DISTURBED - 1 Acre
PROJECT AREA - 4 Acres

LATITUDE = 43.0826 (Google Maps)
LONGITUDE = -97.4028 (Google Maps)

PCN 07V2

GROSS LENGTH	46,346.34 FEET	8.778 MILES
LENGTH OF BRIDGES	416.83 FEET	0.079 MILES
NET LENGTH	45,929.51 FEET	8.699 MILES

PCN 09P4

GROSS LENGTH	1,007.5 FEET	0.191 MILES
LENGTH OF BRIDGES	0.00 FEET	0.000 MILES
NET LENGTH	1,007.5 FEET	0.191 MILES

6

January 22, 2025

PLOTTED FROM - TRPB183884

FILE - ... \PRJ\YANK\07V2\07V2_TITILEA.DGN

PLOT NAME - 1

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-CR 0081(122)3 & P 0046(87)334	A1	A3

REVISED 3 December, 2024 - BAH

Section C - Traffic Control

Section F - Surfacing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E5020	Salvage Traffic Sign	8	Each
110E7150	Remove Sign for Reset	25	Each
110E7152	Remove Delineator for Reset	80	Each
260E1010	Base Course	500.0	Ton
632E2100	Reset Delineator	80	Each
632E3500	Reset Sign	25	Each
634E0010	Flagging	350.0	Hour
634E0020	Pilot Car	150.0	Hour
634E0110	Traffic Control Signs	982.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0135	Traffic Control Supervisor	Lump Sum	LS
634E0275	Type 3 Barricade	30	Each
634E0340	Temporary Raised Pavement Markers	31.5	Mile
634E0380	Tubular Marker	300	Each
634E0420	Type C Advance Warning Arrow Board	2	Each
634E0640	Temporary Pavement Marking	6,500	Ft
634E1002	Detour and Restriction Signing	947.0	SqFt

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
004E0050	Remove Traffic Diversion(s)	Lump Sum	LS
009E0010	Mobilization	Lump Sum	LS
009E1350	Restoration of Stockpile Site	Lump Sum	LS
009E3210	Construction Staking	7.004	Mile
009E3301	Engineer Directed Surveying/Staking	40.0	Hour
009E3320	Checker	Lump Sum	LS
009E4200	Construction Schedule, Category II	Lump Sum	LS
110E0655	Remove Interim Crossover Closure	160	Ft
110E0730	Remove Beam Guardrail	350.0	Ft
110E0800	Remove W Beam Guardrail End Terminal	4	Each
110E1010	Remove Asphalt Concrete Pavement	11,854.6	SqYd
110E6410	Remove Type 1 MGS for Reset	600.0	Ft
110E6500	Remove Type 1 Guardrail Transition for Reset	4	Each
110E6619	Remove MGS MASH Tangent End Terminal for Reset	4	Each
120E0010	Unclassified Excavation	181	CuYd
120E0100	Unclassified Excavation, Digouts	128	CuYd
120E0600	Contractor Furnished Borrow	1,029	CuYd
120E6200	Water for Granular Material	579.1	MGal
210E0100	Shoulder Clearing	10.2	Mile
210E1000	Shoulder Preparation	1.000	Mile
210E1005	Surface Preparation	7.500	Mile
210E2000	Shoulder Shaping	7.500	Mile
260E1010	Base Course	4,799.2	Ton
260E1030	Base Course, Salvaged	14,140.3	Ton
260E2010	Gravel Cushion	7,500.0	Ton
260E6000	Granular Material, Furnish	9,001.1	Ton
270E0020	Salvage and Stockpile Asphalt Mix Material	2,746.1	Ton
270E0110	Salvage and Stockpile Granular Material	14,140.3	Ton
* 270E0220	Blend and Stockpile Granular Material	18,002.2	Ton
* 270E0230	Haul and Stockpile Asphalt Mix Material	3,891.5	Ton
320E0005	PG 58-34 Asphalt Binder	642.1	Ton
320E1070	Class HR Asphalt Concrete	18,317.1	Ton
320E1200	Asphalt Concrete Composite	370.0	Ton
320E3000	Compaction Sample	6	Each
320E5010	Saw and Seal Shoulder Joint	114,890	Ft
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	6.9	Mile
320E7028	Grind Centerline Rumble Stripe in Asphalt Concrete	0.2	Mile
330E0010	MC-70 Asphalt for Prime	96.9	Ton
330E0100	SS-1h or CSS-1h Asphalt for Tack	39.9	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	23.9	Ton
330E1000	Blotting Sand for Prime	81.6	Ton
330E2000	Sand for Flush Seal	57.3	Ton
332E0010	Cold Milling Asphalt Concrete	44,039	SqYd

INDEX OF SHEETS

A1 Estimate of Quantities for PCN 07V2 Sections C, D, F, & M
 A2 Estimate of Quantities for PCN 09P4 Sections C, F & M
 A2 to A3 Environmental Commitments

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
380E0050	8" Nonreinforced PCC Pavement	112,186.2	SqYd
380E5010	Fast Track Concrete	1,500.0	SqYd
380E6000	Dowel Bar	73,036	Each
380E6110	Insert Steel Bar in PCC Pavement	34	Each
410E2600	Membrane Sealant Expansion Joint	104.0	Ft
600E0300	Type III Field Laboratory	1	Each
630E0500	Type 1 MGS	387.5	Ft
630E1501	Type 1 Retrofit Guardrail Transition	2	Each
630E1510	Type 3 Guardrail Transition	2	Each
630E2018	MGS MASH Tangent End Terminal	4	Each
630E5010	Reset Type 1 MGS	600.0	Ft
630E5204	Reset MGS MASH Tangent End Terminal	4	Each
630E5300	Reset Type 1 Guardrail Transition	4	Each
632E2220	Guardrail Delineator	38	Each
650E1080	Type F68 Concrete Curb and Gutter	450	Ft
670E1200	Type B Frame and Grate	2	Each
670E5400	Precast Drop Inlet Collar	2	Each
900E0010	Refurbish Single Mailbox	6	Each
900E0012	Refurbish Double Mailbox	5	Each
900E0022	Remove and Reset Mailbox	16	Each

* - Denotes Non-Participating

Section M - Pavement Marking

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1200	High Build Waterborne Pavement Marking Paint, White	281	Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	180	Gal
633E3000	Durable Pavement Marking, 4" White	50,525	Ft
633E3005	Durable Pavement Marking, 4" Yellow	43,600	Ft
633E3010	Durable Pavement Marking, 8" White	1,600	Ft
633E3030	Durable Pavement Marking, 24" White	784	Ft
633E3035	Durable Pavement Marking, 24" Yellow	420	Ft
633E3045	Durable Pavement Marking, Arrow	20	Each
633E3060	Durable Pavement Marking, Message	6	Word
633E5050	Surface Preparation for Pavement Marking	4,000	Ft
633E5052	Surface Preparation for Pavement Marking	10	Each
633E5100	Grooving for Durable Pavement Marking, 4"	91,700	Ft
633E5105	Grooving for Durable Pavement Marking, 8"	1,600	Ft
633E5115	Grooving for Durable Pavement Marking, 24"	540	Ft
633E5125	Grooving for Durable Pavement Marking, Arrow	14	Each

Section D - Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	6.5	CuYd
110E1693	Remove Erosion Control Wattle	700	Ft
110E1700	Remove Silt Fence	950	Ft
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0100	Cover Crop Seeding	2.0	Bu
730E0212	Type G Permanent Seed Mixture	59	Lb
731E0200	Fertilizing	1.10	Ton
732E0100	Mulching	3.6	Ton
734E0044	Soil Stabilizer	0.5	Acre
734E0103	Type 3 Erosion Control Blanket	2,429	SqYd
734E0154	12" Diameter Erosion Control Wattle	2,800	Ft
734E0165	Remove and Reset Erosion Control Wattle	700	Ft
734E0602	Low Flow Silt Fence	2,800	Ft
734E0604	High Flow Silt Fence	1,000	Ft
734E0610	Mucking Silt Fence	264	CuYd
734E0620	Repair Silt Fence	950	Ft
900E1320	Construction Entrance	2	Each

PCN 09P4 - Section C – Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	80.0	Hour
634E0020	Pilot Car	20.0	Hour
634E0110	Traffic Control Signs	293.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

PCN 09P4 - Section F – Surfacing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement	7.8	SqYd
120E0100	Unclassified Excavation, Dugouts	5	CuYd
120E6200	Water for Granular Material	0.6	MGal
210E0100	Shoulder Clearing	0.4	Mile
260E1010	Base Course	55.3	Ton
260E6000	Granular Material, Furnish	229.1	Ton
270E0020	Salvage and Stockpile Asphalt Mix Material	1.2	Ton
* 270E0220	Blend and Stockpile Granular Material	458.2	Ton
* 270E0230	Haul and Stockpile Asphalt Mix Material	1.2	Ton
320E0005	PG 58-34 Asphalt Binder	7.7	Ton
320E1070	Class HR Asphalt Concrete	218.9	Ton
320E3000	Compaction Sample	3	Each
330E0100	SS-1h or CSS-1h Asphalt for Tack	0.6	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	0.4	Ton
332E0010	Cold Milling Asphalt Concrete	1,946	SqYd

* - Denotes Non-Participating

PCN 09P4 - Section M – Pavement Marking

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E3000	Durable Pavement Marking, 4" White	2,423	Ft
633E3005	Durable Pavement Marking, 4" Yellow	2,842	Ft
633E3030	Durable Pavement Marking, 24" White	96	Ft
633E3035	Durable Pavement Marking, 24" Yellow	400	Ft
633E3045	Durable Pavement Marking, Arrow	3	Each
633E3060	Durable Pavement Marking, Message	6	Word
633E5050	Surface Preparation for Pavement Marking	5,761	Ft
633E5052	Surface Preparation for Pavement Marking	7	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 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.

The Contractor will not withdraw water directly from streams of the James, Big Sioux, and Vermillion watersheds without prior approval from the SDDOT Environmental Office.

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://sdeastwanted.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) >

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	NH-CR 0081(122)3 & P 0046(87)334	A3	A3

REVISED 11 October, 2024 - BAH

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_CGPA_ppendixCCA2018Fillable.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 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 or 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 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/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.