

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0903(91)174	1	175

Plotting Date: 07/01/2014

STATE OF SOUTH DAKOTA
 DEPARTMENT OF TRANSPORTATION
 PLANS FOR PROPOSED

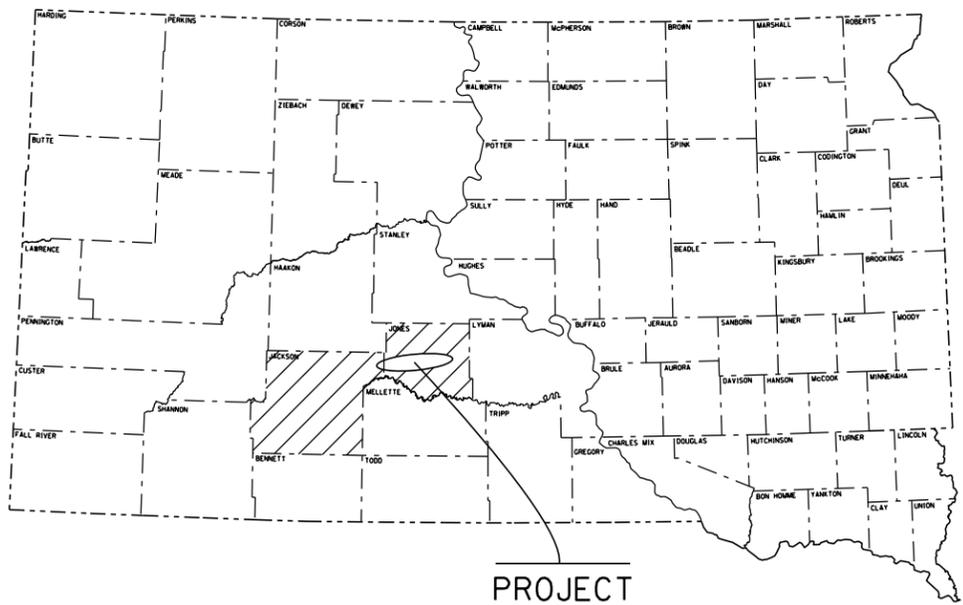
IM 0903(91)174
INTERSTATE 90 EBL
JACKSON & JONES COUNTIES

PCC Overlay, PCC Pavement, Cold Milling Asphalt Concrete, Asphalt Concrete Resurfacing of Ramps, Guardrail, and Permanent Vehicle Classification System
 PCN 020K

INDEX OF SECTIONS

Section A:	Estimate of Quantities
Section C:	Traffic Control Plans
Section D:	Erosion Control Plans
Section F:	Surfacing Plans
Section M:	Pavement Marking Plans
Section S:	Permanent Signing
Section X:	Surfacing Cross Sections

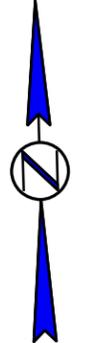
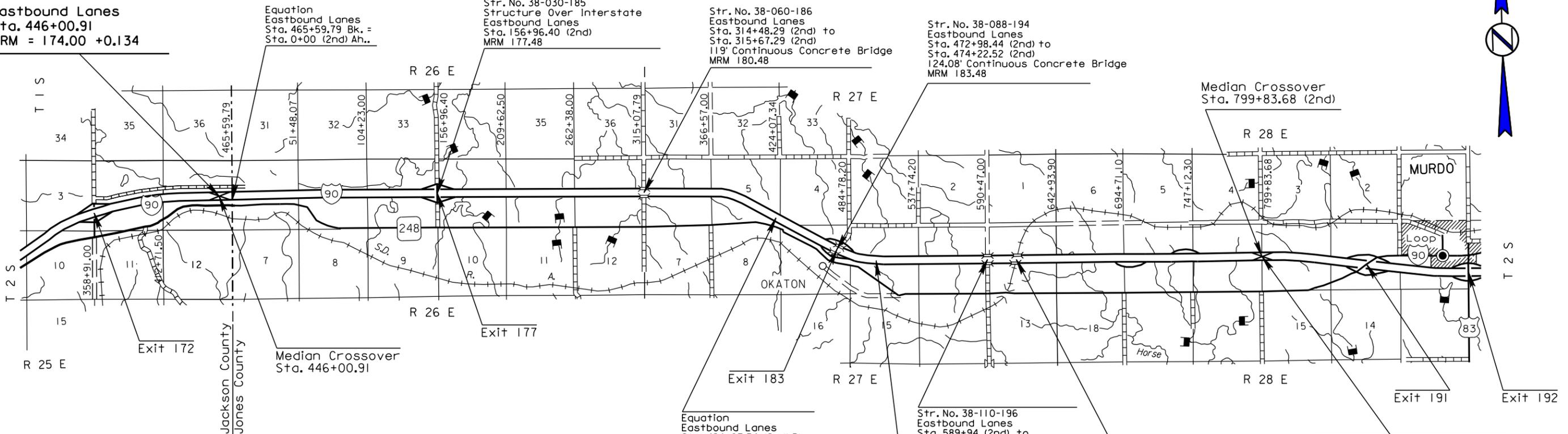
PLOT SCALE - 1:7920



PROJECT

BEGIN IM 0903(91)174

Eastbound Lanes
 Sta. 446+00.91
 MRM = 174.00 +0.134



DESIGN DESIGNATION

ADT (2012)	2872
ADT (2032)	3789
DHV	625
D	51%
T DHV	13.4%
T ADT	29.4%
V	75 mph

STORM WATER PERMIT

Major Receiving
 Body of Water: Unnamed Tributary of the White River
 Area Disturbed: 51.6 Acres
 Total Project Area: 661.4 Acres
 Approx. Begin Lat/Long 43.9011/-101.0743

LENGTH 81,857.75 FEET 15.503 MILES

END IM 0903(91)174

Eastbound Lanes
 Sta. 799+83.68 (2nd)
 MRM = 189.00 +0.634

4

PLOTTED FROM - TRPR18388

FILE - U:\MS\PR\1\JONS020K\TITLEA.DGN

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0903(91)174	A1	A3

Revised 7-29-2014 LLH

INDEX OF SHEETS

A1	Estimate of Quantities for Sections C,D, F, M and S
A2 and A3	Environmental Commitments

Surfacing – Section F

Bid Item Number	Item	Quantity	Unit
004E0050	Remove Traffic Diversion(s)	Lump Sum	LS
009E0010	Mobilization	Lump Sum	LS
009E3230	Grade Staking	21.183	Mile
009E3240	Graded Centerline Staking	15.503	Mile
009E3250	Miscellaneous Staking	17.711	Mile
009E3280	Slope Staking	1.444	Mile
009E3300	Three Man Survey Crew	40.0	Hour
110E0655	Remove Interim Crossover Closure	960	Ft
110E0700	Remove 3 Cable Guardrail	2,708	Ft
110E0740	Remove 3 Cable Guardrail Anchor Assembly	22	Each
110E0745	Remove 3 Cable Guardrail Slip Base Anchor Assembly	4	Each
110E0800	Remove W Beam Guardrail End Terminal	4	Each
110E1100	Remove Concrete Pavement	14,921.9	SqYd
110E4100	Salvage 3 Cable Guardrail	1,496	Ft
110E4290	Salvage Beam Guardrail	600.0	Ft
110E4360	Salvage W Beam Guardrail Breakaway Cable Terminal	4	Each
110E6000	Remove 3 Cable Guardrail for Reset	2,676	Ft
110E6010	Remove 3 Cable Guardrail Anchor Assembly for Reset	8	Each
110E6230	Remove W Beam Guardrail for Reset	500.0	Ft
110E6260	Remove W Beam Guardrail Breakaway Cable Terminal for Reset	8	Each
120E0010	Unclassified Excavation	8,510	CuYd
120E0100	Unclassified Excavation, Digouts	388	CuYd
120E0600	Contractor Furnished Borrow	62,652	CuYd
120E6100	Water for Embankment	692.1	MGal
120E6200	Water for Granular Material	1,062.6	MGal
120E9000	Pit Run Material	3,605.5	Ton
210E3000	Ordinary Roadway Shaping	0.667	Mile
250E0010	Incidental Work	Lump Sum	LS
260E1010	Base Course	62,635.0	Ton
260E1050	Base Course, Salvaged Asphalt Mix	6,056.3	Ton
260E2030	Gravel Cushion, Salvaged	4,198.6	Ton
260E2060	Gravel Cushion, Modified	3,291.7	Ton
270E0040	Salvage and Stockpile Asphalt Mix and Granular Base Material	4,198.6	Ton
320E0004	PG 58-28 Asphalt Binder	950.2	Ton
320E1070	Class HR Asphalt Concrete	23,635.0	Ton
320E1200	Asphalt Concrete Composite	11,018.1	Ton
320E3000	Compaction Sample	3	Each
320E5010	Saw and Seal Shoulder Joint	160,412	Ft
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	30.2	Mile
330E0010	MC-70 Asphalt for Prime	187.2	Ton
330E0100	SS-1h or CSS-1h Asphalt for Tack	37.3	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	26.5	Ton
330E2000	Sand for Flush Seal	51.1	Ton
332E0010	Cold Milling Asphalt Concrete	91,498	SqYd
380E0110	11" Nonreinforced PCC Pavement	55,511.3	SqYd
380E1500	PCC Overlay, Furnish	42,686.2	CuYd
380E1580	8" PCC Overlay, Placement	181,213.8	SqYd
380E6000	Dowel Bar	112,352	Each
380E6110	Insert Steel Bar in PCC Pavement	200	Each
380E6500	Planing PCC Pavement	240.0	SqYd
410E2600	Membrane Sealant Expansion Joint	25.0	Ft
600E0300	Type III Field Laboratory	1	Each
629E0100	3 Cable Guardrail	452	Ft
629E0110	NCHRP 350 Test Level 3 High Tension Cable Guardrail	1,696	Ft
629E0200	Reset 3 Cable Guardrail	2,676	Ft

Surfacing – Section F (Continued)

Bid Item Number	Item	Quantity	Unit
629E0290	NCHRP 350 Test Level 3 High Tension Cable Guardrail Anchor Assembly	4	Each
629E0300	3 Cable Guardrail Slip Base Anchor Assembly	8	Each
629E0410	Reset 3 Cable Guardrail Anchor Assembly	8	Each
* 629E1109	Furnish High Tension Cable Guardrail Post and Sleeve	80	Each
* 629E8010	Cable Tension Indicator	1	Each
629E9000	Crossover Closure	448	Ft
630E2110	Beam Guardrail Post and Block	64	Each
630E2205	Breakaway Cable Terminal End Post	16	Each
630E5160	Reset W Beam Rail	500.0	Ft
630E5180	Reset W Beam Guardrail Breakaway Cable Terminal	8	Each
680E0015	Edge Drain Outlet	276	Each
831E0210	Non-woven Geotextile Separator	5,564	SqYd
831E1500	Geotextile Bond Breaker Fabric	323,087	SqYd
900E5840	Permanent Vehicle Classification System	1	Each

* - Denotes Non-Participating

SPECIFICATIONS

Standard Specifications for Roads & Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and Special Provisions as included in the Proposal.

Traffic Control – Section C

Bid Item Number	Item	Quantity	Unit
110E1400	Remove Pavement Marking, 4" or Equivalent	4,500	Ft
632E3600	Temporary Signage	1,514.0	SqFt
634E0010	Flagging	500	Hour
634E0100	Traffic Control	7,082	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0340	Raised Pavement Markers	15,600	Mile
634E0380	Tubular Marker	1,530	Each
634E0420	Type C Advance Warning Arrow Panel	2	Each
634E0620	Temporary Pavement Marking, Continuous 4" Edge Line	164,900	Ft
634E0630	Temporary Pavement Marking	11.3	Mile
634E1215	Contractor Furnished Portable Changeable Message Sign	3	Each

Erosion and Sediment Control – Section D

Bid Item Number	Item	Quantity	Unit
110E1690	Remove Sediment	4.0	CuYd
110E1700	Remove Silt Fence	250	Ft
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0251	Special Permanent Seed Mixture 1	2,080	Lb
732E0100	Mulching	160.0	Ton
734E0154	12" Diameter Erosion Control Wattle	1,500	Ft
734E0165	Remove and Reset Erosion Control Wattle	375	Ft
734E0604	High Flow Silt Fence	1,000	Ft
734E0610	Mucking Silt Fence	70	CuYd
734E0620	Repair Silt Fence	250	Ft
900E1320	Construction Entrance	2	Each

Pavement Marking – Section M

Bid Item Number	Item	Quantity	Unit
633E0010	Cold Applied Plastic Pavement Marking, 4"	1,900	Ft
633E0025	Cold Applied Plastic Pavement Marking, 12"	3,900	Ft
633E1200	Waterborne Pavement Marking Paint with High Grade Polymer, White	1,126.0	Gal
633E1205	Waterborne Pavement Marking Paint with High Grade Polymer, Yellow	911.0	Gal
633E5000	Grooving for Cold Applied Plastic Pavement Marking, 4"	1,900	Ft
633E5010	Grooving for Cold Applied Plastic Pavement Marking, 12"	3,900	Ft
633E5100	Grooving for Durable Pavement Marking, 4"	386,661	Ft

Permanent Signing – Section S

Bid Item Number	Item	Quantity	Unit
110E5020	Salvage Traffic Sign	18	Each
632E2000	4"x4" Amber Delineator with 1.12 Lb/Ft Post	34	Each
632E2004	4"x8" Amber Delineator with 1.12 Lb/Ft Post	15	Each
632E2020	4"x4" White Delineator with 1.12 Lb/Ft Post	216	Each
632E2024	4"x8" White Delineator with 1.12 Lb/Ft Post	78	Each
632E2520	Type 2 Object Marker	3	Each

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0903(91)174	A2	A3

ENVIRONMENTAL COMMITMENTS

An Environmental Commitment is a measure that SDDOT commits to implement in order to avoid, minimize, and/or mitigate a real or potential environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency mentioned below with permitting authority can influence a project if perceived 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. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office. The environmental commitments associated with this project are as follows:

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 pit, or staging site associated with the project, cease construction activities in the affected area until the Whooping Crane departs and 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 shall not withdraw water with equipment previously used outside the State of South Dakota without prior approval from the SDDOT Environmental Office. Thoroughly wash all construction equipment before entering South Dakota to reduce the risk of invasive species introduction into the project vicinity.

Action Taken/Required:

The Contractor shall obtain the necessary permits from the regulatory agencies such as the Department of Environment and Natural Resources (DENR) and the United States Army Corps of Engineers (COE) prior to executing water extraction activities.

COMMITMENT E: STORM WATER

Construction activities constitute 1 acre or more of earth disturbance.

Action Taken/Required:

The DENR and the US Environmental Protection Agency (EPA) have issued separate general permits for the discharge of storm water runoff. The DENR permit applies to discharges on state land and the EPA permit applies to discharges on federal or reservation land. The Contractor is advised this project is regulated under the Phase II Storm Water Regulations and must receive coverage under the General Permit for Construction Activities. A Notice of Intent (NOI) will be submitted to DENR a minimum of 15 days prior to project start by the DOT Environmental Office. A letter must be received from DENR that acknowledges project coverage under this general permit before project start. The Contractor is advised that permit coverage may also be required by off-site activities, such as borrow and staging areas, which are the responsibility of the Contractor.

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

A major component of the storm water construction permits is development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which is a joint effort and responsibility of the SDDOT and the Contractor. Erosion control measures and best management practices will be implemented in accordance with the SWPPP. The SWPPP is a dynamic document and is to be available on-site at all times.

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

SDDOT: <http://sddot.com/transportation/highways/environmental/stormwater/Default.aspx>

DENR: <http://www.denr.sd.gov/des/sw/stormwater.aspx>

Contractor Certification Form:

The "Department of Environmental and Natural Resources – Contractor Certification Form" (SD EForm – 2110LDV1-ContractorCertification.pdf) shall be completed by the Contractor or their certified Erosion Control Supervisor after the award of the contract. Work may not begin on the project until this form is signed.

The form certifies under penalty of law that the Contractor understands and will comply with the terms and conditions of the Surface Water Discharge General Permit for Storm Water Discharges Associated with Construction Activities for the Project.

The online form can be found at: <http://denr.sd.gov/des/sw/eforms/E2110LDV1-ContractorCertification.pdf>

COMMITMENT H: WASTE DISPOSAL SITE

The Contractor shall 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 State ROW.

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

The waste disposal site(s) shall 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 Project Engineer.

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

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction and/or demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the State ROW through the use of 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 of time not to exceed the duration of the project. Prior to project completion, the waste shall 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) shall be incidental to the various contract items.

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0903(91)174	A3	A3

COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historical Preservation Office (SHPO or THPO) for all work included within the project limits and all designated option borrow sites provided within the plans.

Action Taken/Required:

All earth disturbing activities not designated within the plans require review of cultural resources impacts. This work includes, but is not limited to: staging areas, borrow sites, waste disposal sites, and all material processing sites.

The Contractor shall arrange and pay for a cultural resource survey and/or records search. 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; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor shall provide ARC with the following: a topographical map or aerial view on 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 shall submit the records search or cultural resources survey report and if the location of the site is within the current geographical or historic boundaries of any South Dakota reservation to SDDOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3180). 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.

If evidence for cultural resources is uncovered during project construction activities, then such activities shall cease and the Project Engineer shall be immediately notified. The Project Engineer will contact the SDDOT Environmental Engineer in order 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 staging areas, borrow sites, waste disposal sites, or material processing sites that affect wetlands, threatened and endangered species, or waterways. The Contractor shall provide the required permits and clearances to the Project Engineer at the preconstruction meeting.