STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P0018(181)12 & P 0385(49)36	A1	A3

Plotting Date: 01/08/2016

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

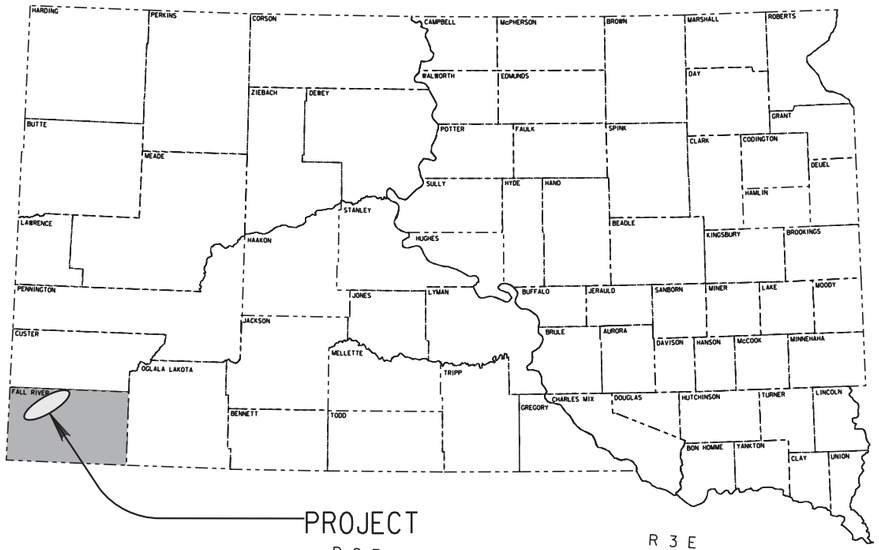
PROJECT P 0018(181)12 & P 0385(49)36
US HIGHWAYS 18 & 385
FALL RIVER COUNTY

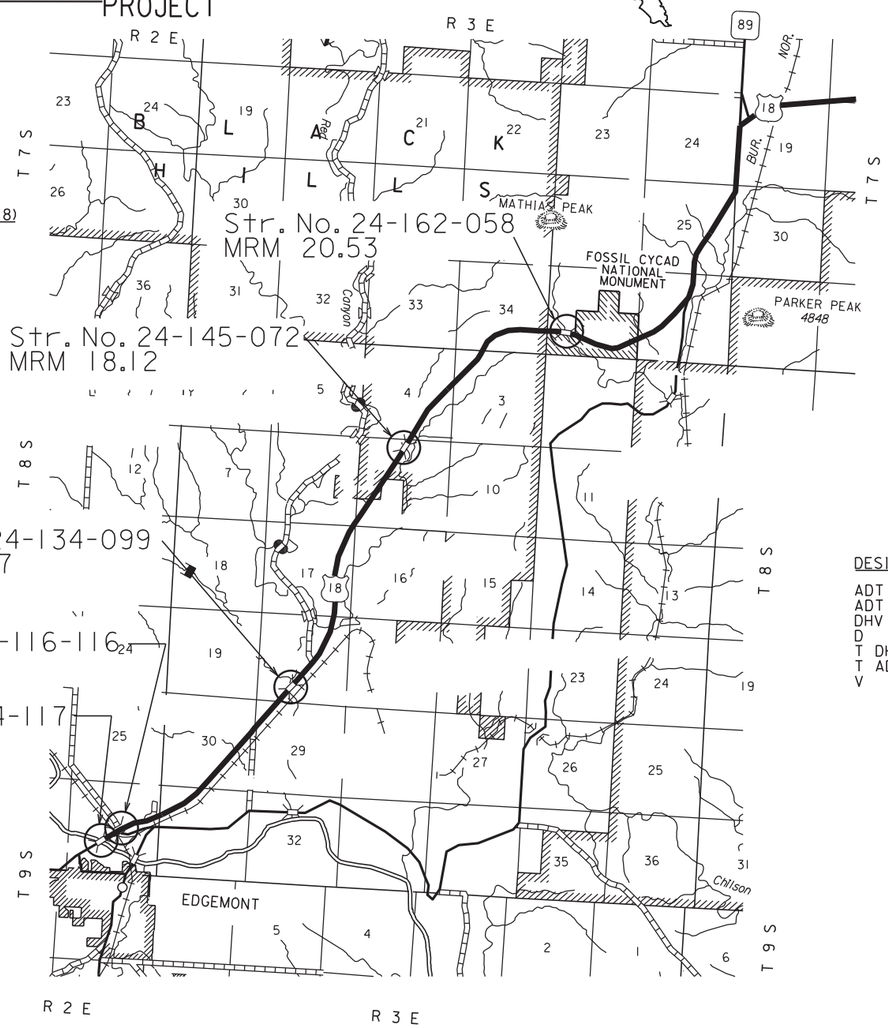
Bridge Deck Polymer Chip Seal

PCNs 03AC & 03AD

INDEX OF SECTIONS

Section A: Estimate of Quantities and Environmental Commitments
Section C: Traffic Control Plans
Section E: Structure Plans





DESIGN DESIGNATION (US18)

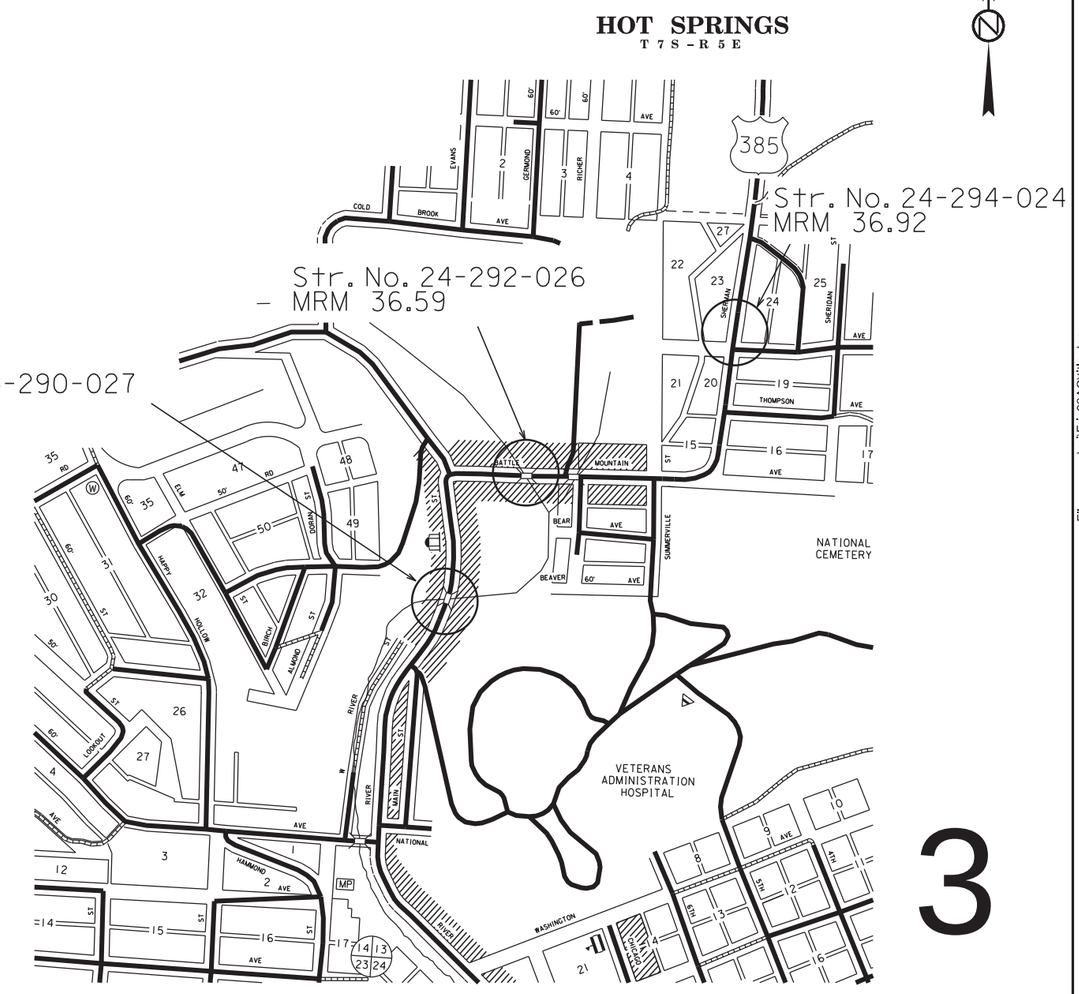
ADT (2014)	1806
ADT (2034)	2289
DHV	448.6
D	53%
T DHV	11%
T ADT	24.2%
V	65 mph

STORM WATER PERMIT

None Required

DESIGN DESIGNATION US(385)

ADT (2014)	4020
ADT (2034)	5093
DHV	789.1
D	51%
T DHV	1.7%
T ADT	3.8%
V	25 mph



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ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P0018(181)12 & P 0385(49)36	A2	A3

Section C - Traffic Control (PCN 03AC)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
633E1400	Pavement Marking Paint, 4" White	4,652	Ft
633E1405	Pavement Marking Paint, 4" Yellow	3,697	Ft
634E0010	Flagging	100.0	Hour
634E0110	Traffic Control Signs	703	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0285	Type 3 Barricade, 8' Double Sided	6	Each
634E0640	Temporary Pavement Marking	6,560	Ft
634E0900	Portable Temporary Traffic Control Signal	4	Unit

Section C - Traffic Control (PCN 03AD)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
633E1400	Pavement Marking Paint, 4" White	572	Ft
633E1405	Pavement Marking Paint, 4" Yellow	572	Ft
634E0010	Flagging	50.0	Hour
634E0110	Traffic Control Signs	718	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0285	Type 3 Barricade, 8' Double Sided	6	Each
634E0640	Temporary Pavement Marking	1,312	Ft

Section E – Structure (PCN 03AC)

Section E - Structure 24-114-117

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
460E0172	Concrete Patching Material, Bridge Deck	25.6	CuFt
460E0174	Concrete Patching Material, Miscellaneous	0.7	CuFt
460E0300	Breakout Structural Concrete	0.1	CuYd
480E5000	Galvanic Anode	1	Each
491E0005	Two Coat Bridge Deck Polymer Chip Seal	3,474.4	SqYd
491E0110	Abrasive Blasting of Bridge Deck	3,474.4	SqYd
491E0120	Bridge Deck Grinding	3,474.4	SqYd
491E0130	Concrete Removal, Class A	4.0	SqYd
491E0140	Concrete Removal, Class B	4.0	SqYd

Section E - Structure 24-116-116

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
460E0172	Concrete Patching Material, Bridge Deck	42.5	CuFt
460E0174	Concrete Patching Material, Miscellaneous	1.0	CuFt
460E0300	Breakout Structural Concrete	0.1	CuYd
480E5000	Galvanic Anode	1	Each
491E0005	Two Coat Bridge Deck Polymer Chip Seal	1,266.2	SqYd
491E0110	Abrasive Blasting of Bridge Deck	1,266.2	SqYd
491E0120	Bridge Deck Grinding	1,266.2	SqYd
491E0130	Concrete Removal, Class A	6.7	SqYd
491E0140	Concrete Removal, Class B	6.7	SqYd

Section E - Structure 24-134-099

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
460E0172	Concrete Patching Material, Bridge Deck	47.2	CuFt
460E0174	Concrete Patching Material, Miscellaneous	0.5	CuFt
460E0300	Breakout Structural Concrete	0.1	CuYd
480E5000	Galvanic Anode	1	Each
491E0005	Two Coat Bridge Deck Polymer Chip Seal	801.8	SqYd
491E0110	Abrasive Blasting of Bridge Deck	801.8	SqYd
491E0120	Bridge Deck Grinding	801.8	SqYd
491E0130	Concrete Removal, Class A	4.7	SqYd
491E0140	Concrete Removal, Class B	4.7	SqYd

Section E - Structure 24-145-072

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
460E0172	Concrete Patching Material, Bridge Deck	24.8	CuFt
460E0300	Breakout Structural Concrete	9.4	CuYd
462E0100	Class M6 Concrete	9.4	CuYd
480E5000	Galvanic Anode	184	Each
491E0005	Two Coat Bridge Deck Polymer Chip Seal	1,600.8	SqYd
491E0110	Abrasive Blasting of Bridge Deck	1,600.8	SqYd
491E0120	Bridge Deck Grinding	1,600.8	SqYd
491E0130	Concrete Removal, Class A	4.0	SqYd
491E0140	Concrete Removal, Class B	4.0	SqYd

Section E - Structure 24-162-058

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
460E0172	Concrete Patching Material, Bridge Deck	25.6	CuFt
491E0005	Two Coat Bridge Deck Polymer Chip Seal	3,556.0	SqYd
491E0110	Abrasive Blasting of Bridge Deck	3,556.0	SqYd
491E0120	Bridge Deck Grinding	3,556.0	SqYd
491E0130	Concrete Removal, Class A	4.0	SqYd
491E0140	Concrete Removal, Class B	4.0	SqYd

Section E – Structure (PCN 03AD)

Section E - Structure 24-290-027

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
460E0172	Concrete Patching Material, Bridge Deck	24.0	CuFt
491E0005	Two Coat Bridge Deck Polymer Chip Seal	700.4	SqYd
491E0110	Abrasive Blasting of Bridge Deck	700.4	SqYd
491E0120	Bridge Deck Grinding	700.4	SqYd
491E0130	Concrete Removal, Class A	4.0	SqYd
491E0140	Concrete Removal, Class B	4.0	SqYd

Section E - Structure 24-292-026

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
460E0172	Concrete Patching Material, Bridge Deck	72.0	CuFt
491E0005	Two Coat Bridge Deck Polymer Chip Seal	633.4	SqYd
491E0110	Abrasive Blasting of Bridge Deck	633.4	SqYd
491E0120	Bridge Deck Grinding	633.4	SqYd
491E0130	Concrete Removal, Class A	4.0	SqYd
491E0140	Concrete Removal, Class B	4.0	SqYd

Section E - Structure 24-294-024

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
460E0172	Concrete Patching Material, Bridge Deck	156.8	CuFt
460E0174	Concrete Patching Material, Miscellaneous	6.2	CuFt
460E0300	Breakout Structural Concrete	0.2	CuYd
480E5000	Galvanic Anode	2	Each
491E0005	Two Coat Bridge Deck Polymer Chip Seal	169.4	SqYd
491E0110	Abrasive Blasting of Bridge Deck	169.4	SqYd
491E0120	Bridge Deck Grinding	169.4	SqYd
491E0130	Concrete Removal, Class A	11.8	SqYd
491E0140	Concrete Removal, Class B	11.8	SqYd

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

SPECIFICATIONS

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

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 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 E: STORM WATER

Construction activities constitute less than 1 acre of disturbance.

Action Taken/Required:

At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site.

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.

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 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 review of cultural resources impacts. 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 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 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 shall provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

COMMITMENT R: FIRE PREVENTION IN THE BLACK HILLS AREA

This project is located within the confines of the Black Hills Forest Fire Protection Boundary.

Action Taken/Required:

The Contractor shall adhere to the "Special Provision for Fire Plan".