

STATE OF SOUTH DAKOTA
 DEPARTMENT OF TRANSPORTATION
 PLANS FOR PROPOSED
PROJECT
EM 0902(156)61
INTERSTATE 90
PENNINGTON COUNTY

THREE BEAM END BLOCKS, PARTIAL SURFACING, LANDSCAPING AND GUARDRAIL
 PCN 01XA

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	EM 0902(156)61	1	76

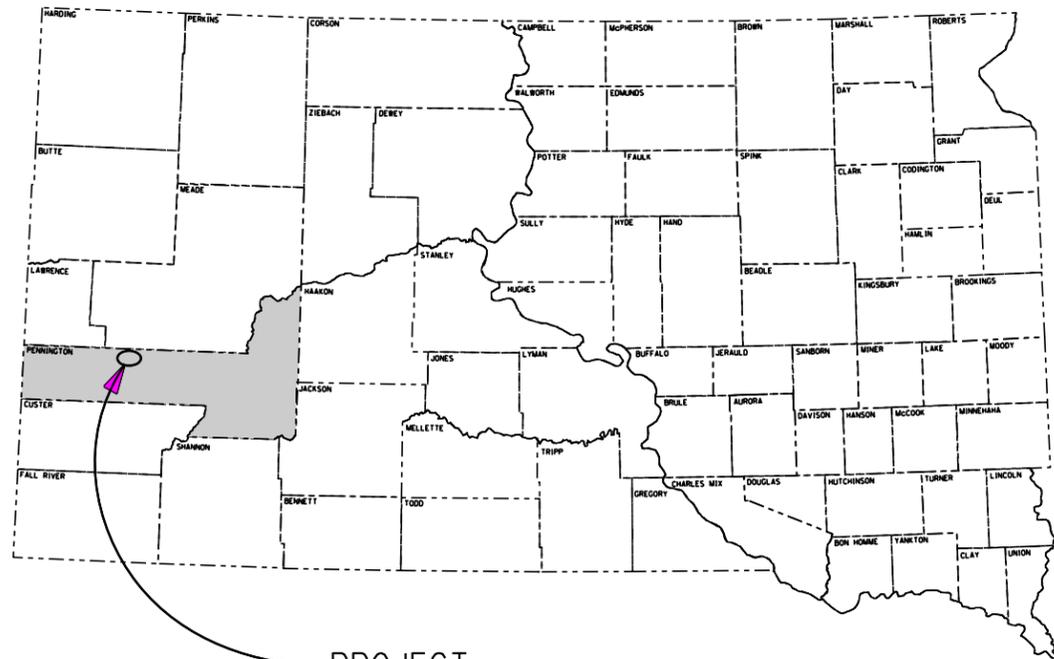
Plotting Date: 02/20/2014

Revised 2-20-2014 LLH

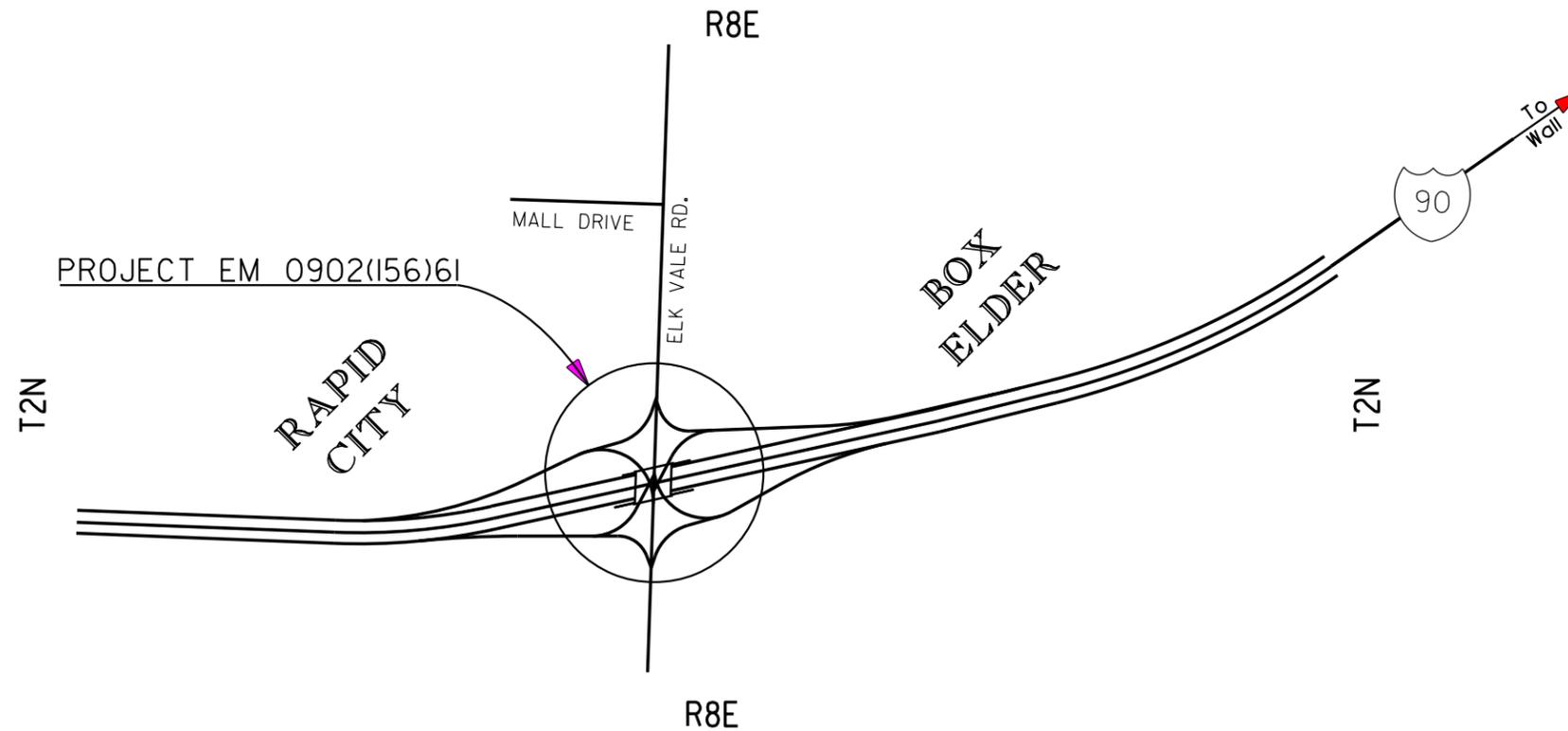
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PLOT SCALE - 1" = 1000'



PROJECT



STORM WATER PERMIT

Major Receiving
 Body of Water: Box Elder Creek
 Area Disturbed: 0.5 Acres
 Total Project Area: 0.6 Acres
 Approx. Lat/Long +44.1004014/-103.1513042

DESIGN DESIGNATION

	EB Off Ramp	EB On Ramp	WB Off Ramp	WB On Ramp	Elk Vale
ADT (2011)	4,955	3,990	4,035	4,500	11,810
ADT (2031)	8,635	6,950	7,030	7,840	13,641
DHV	950	765	775	860	1,596
D	100%	100%	100%	100%	50%
T DHV	6.6%	6.6%	6.6%	6.6%	5.2%
T ADT	14.6%	14.6%	14.6%	14.6%	11.5%
V	50 mph	50 mph	50 mph	50 mph	50 mph

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PLOTTED FROM - TRPR18388

PLOT NAME - 1

FILE - U:\MS\PR\PENND01XA\TITLEA.DGN

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM-EM 0902(156)61	A1	A3

SPECIFICATIONS

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

Traffic Control – Section C

Bid Item Number	Item	Quantity	Unit
634E0010	Flagging	500	Hour
634E0100	Traffic Control	1,049	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0525	Linear Delineation System Panel, Barrier Mounted	20	Each
634E0700	Traffic Control Movable Concrete Barrier	93	Each
634E0750	Temporary Concrete Barrier End Protection	2	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	1	Each
634E1215	Contractor Furnished Portable Changeable Message Sign	2	Each

Erosion and Sediment Control – Section D

Bid Item Number	Item	Quantity	Unit
110E1690	Remove Sediment	1.0	CuYd
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0204	Type C Permanent Seed Mixture	25	Lb
731E0100	Fertilizing	2,780	Lb
732E0250	Fiber Mulching	4,170	Lb
734E0154	12" Diameter Erosion Control Wattle	200	Ft
734E0165	Remove and Reset Erosion Control Wattle	200	Ft

Structure – Section E

Bid Item Number	Item	Quantity	Unit
460E0100	Class A45 Concrete, Miscellaneous	24.8	CuYd
460E0380	Install Dowel in Concrete	4	Each
480E0200	Epoxy Coated Reinforcing Steel	3,771	Lb

Surfacing – Section F

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
009E3250	Miscellaneous Staking	0.044	Mile
110E0300	Remove Concrete Curb and Gutter	72	Ft
110E1010	Remove Asphalt Concrete Pavement	69.6	SqYd
120E0010	Unclassified Excavation	29	CuYd
260E1010	Base Course	22.8	Ton
320E1200	Asphalt Concrete Composite	19.2	Ton
628E1200	Haul Movable Concrete Barrier	18	Each
630E0110	Straight Double Class A Thrie Beam Guardrail with Wood Posts	25.0	Ft
630E1010	Straight Class A W Beam Guardrail with Wood Posts	125.0	Ft
630E2000	W Beam to Thrie Beam Guardrail Transition	2	Each
650E0090	Type B69 Concrete Curb and Gutter	40	Ft

Irrigation – Section G

Bid Item Number	Item	Quantity	Unit
250E0010	Incidental Work	Lump Sum	LS
451E0114	14" Steel Encasement Pipe	100	Ft
451E0656	6" PVC Restrained Joint Water Main	582	Ft
451E0808	2" Copper Pipe	4	Ft
451E2207	6"x6" Pipe Tee	1	Each
451E2413	8"x6" Pipe Reducer	1	Each
451E2808	2" Corporation Stop with Tapping Saddle	2	Each
451E2908	2" Curb Stop with Box	2	Each
451E3006	6" Pipe Bend	2	Each
451E4206	6" Gate Valve with Box	1	Each
451E4585	Fire Hydrant with Auxiliary Valve & Box	2	Each
451E6105	Connect To Existing Water Main	3	Each
451E7400	Corrosion Protection	Lump Sum	LS
900E5430	Irrigation System	Lump Sum	LS

Landscaping – Section H

Bid Item Number	Item	Quantity	Unit
731E0100	Fertilizing	6	Lb
735E0110	1 Gallon Perennial Plant, Furnish and Plant	541	Each
735E1210	2 Gallon Deciduous Shrub, Furnish and Plant	55	Each
735E1520	2 Gallon Coniferous Shrub, Furnish and Plant	52	Each
900E5149	Landscaping Rock	33.0	CuYd
900E5152	Weed Barrier Fabric	297	SqYd

Signal and Lighting – Section L

Bid Item Number	Item	Quantity	Unit
110E5110	Salvage Signal Equipment	Lump Sum	LS
635E5922	Pedestrian Signal Head with Countdown Timer	8	Each
635E5930	Pedestrian Crossing Sign	8	Each

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A1	Estimate of Quantities for Sections C,D,E, F, G, H and L
A2 to A3	Environmental Commitments

AS-BUILT PLANS

The Contractor shall measure and record any horizontal or vertical deviations from the contract drawings associated with "Section G: Irrigation" of these plans. Specifically, all service taps, connections, anodes and buried fittings shall be recorded for the work. The changes shall be recorded in an accurate, neat fashion on the drawings and furnished to the Engineer upon completion of the project. The as-built drawings shall be on-site and available for review by the Engineer upon request. Payment for this shall be incidental to other bid items.

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

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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 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.

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COMMITMENT K: RAPID CITY AREA AIR QUALITY CONTROL ZONE

Administrative Rule of South Dakota (ARSD) 74:36:18:03 states that "no state facility or state contractor may engage in any construction activity or continuous operation activity within the Rapid City air quality control zone which may cause fugitive emissions of particulate to be released into the ambient air without first obtaining a permit issued by the board or the secretary."

Construction activity is defined as any temporary activity at a state facility, which involves the removal or alteration of the natural or pre-existing cover of one acre or more of land. One acre of surface area is based on a cumulative area of disturbance to be completed for the entire project. Construction activity shall include, but not be limited to, stripping of topsoil, drilling, blasting, excavation, dredging, ditching, grading, street maintenance and repair, or earth moving. Construction activity is generally completed within one year. It also includes stockpiles, access roads, and disposal areas. An off-site disposal area of excess material will require an additional permit.

Action Taken/Required:

In order to be considered eligible for authorization to conduct a construction activity under the terms and conditions of this permit, the owner operator must submit a Notice of Intent (NOI) form. The form must be submitted to the address below at least seven business days prior to the anticipated date of beginning the construction activity.

South Dakota Department of Environment and Natural Resources Air Quality Program
523 East Capitol, Joe Foss Building
Pierre, SD 57501-3181
Phone: 605-773-3151

The permit requires the Contractor to use reasonably available technology to control fugitive dust emissions. The Contractor is required to use control measures for track out, paved areas, unpaved roads, unpaved parking lots, disturbed areas, and for material handling and storage. The control measures that the Contractor is required to use are listed in the permit.