

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0212(162)380	1	107

Plotting Date: 08/12/2015

INDEX OF SECTIONS

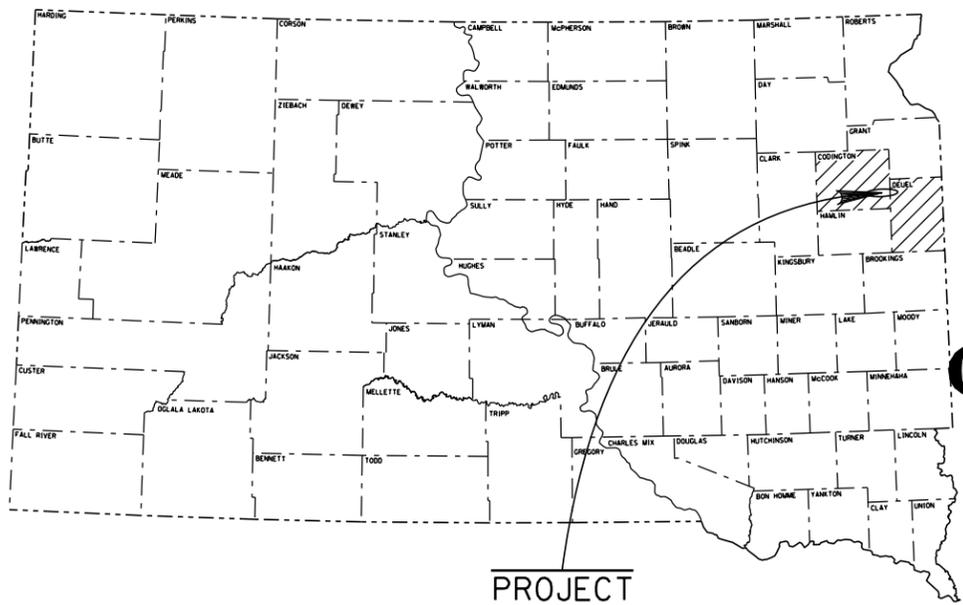
SECTION A:	ESTIMATE OF QUANTITIES and ENVIRONMENTAL COMMITMENTS
SECTION C:	TRAFFIC CONTROL PLANS
SECTION D:	EROSION CONTROL
SECTION F:	SURFACING PLANS
SECTION S:	PERMANENT SIGNING

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION

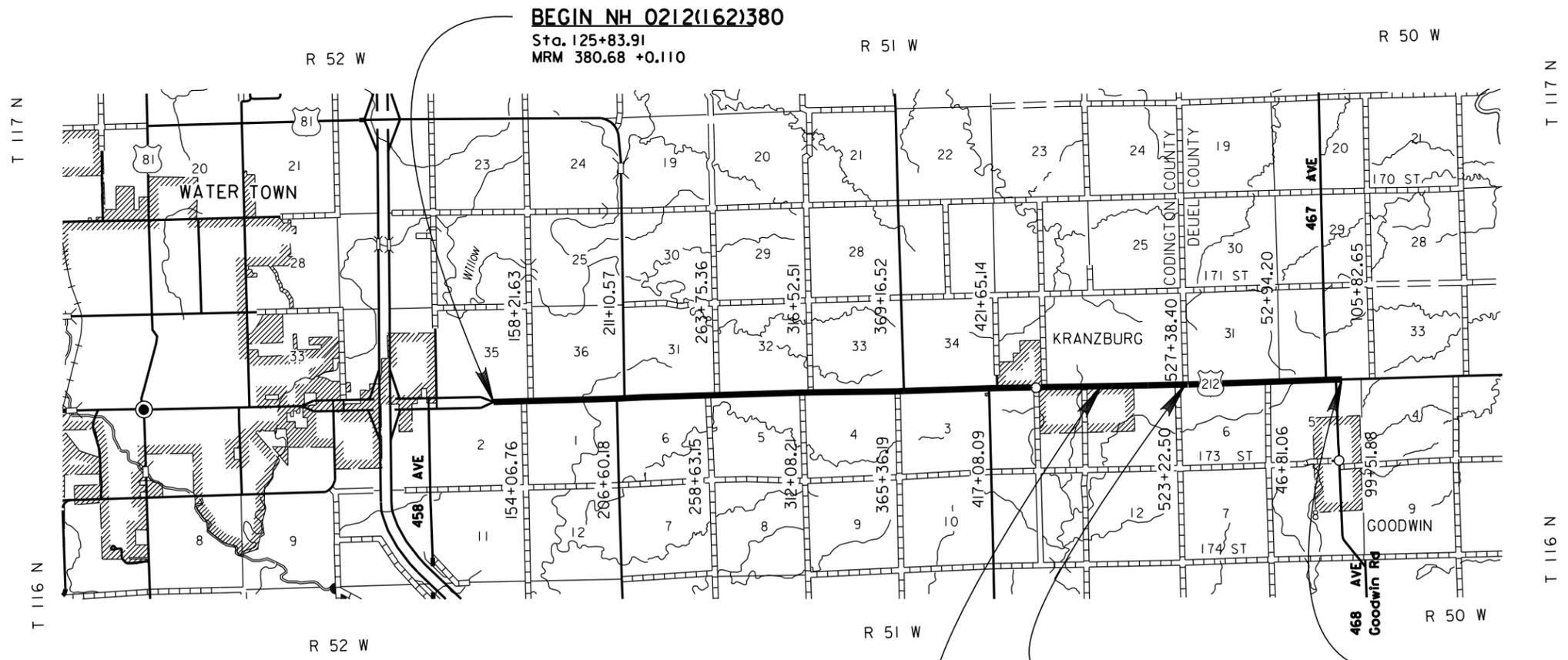
PLANS FOR PROPOSED

PROJECT NH 0212(162)380
US HIGHWAY 212
CODINGTON & DEUEL COUNTIES

FABRIC BOND BREAKER
7" PCC PAVEMENT OVERLAY
WITH ASPHALT CONCRETE SHOULDERS
PCN 03RN



PROJECT



BEGIN NH 0212(162)380
Sta. 125+83.91
MRM 380.68 +0.110

R 50 W

T 117 N

T 117 N

T 116 N

T 116 N

R 52 W

R 51 W

R 50 W

DESIGN DESIGNATION

ADT (2014)	2769
ADT (2034)	3682
DHV	412
D	53%
T DHV	6.9%
T ADT	15.3%
V	70 MPH

STORM WATER PERMIT

MAJOR STREAM - Stray Horse Creek

ACRES DISTURBED - 36 Acres
PROJECT AREA - 173 Acres
LATITUDE = 44.8900
LONGITUDE = -97.0375

Equation
Sta. a 527+38.40 Bk. =
Sta. b 0+00 Ah.

END NH 0212(162)380

Sta. b 91+45.12
MRM 390.00 +0.022

Equation
Sta. a 474+51.71 Bk. =
Sta. a 474+51.64 Ah.

LENGTH 49,299.68 FEET 9.337 MILES

3

PLOT SCALE - 1:7920

PLOT NAME - 1

FILE - U:\MS\PR\CODING\03RN\TITLE.DGN

PLOTTED FROM - TRPR18387

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0212(162)380	A1	A2

Traffic Control – Section C

Revised 08-19-2015 LLA

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1400	Remove Pavement Marking, 4" or Equivalent	150	Ft
632E2510	Type 2 Object Marker Back to Back	4	Each
633E1300	Pavement Marking Paint, White	878	Gal
633E1305	Pavement Marking Paint, Yellow	312	Gal
633E3000	Durable Pavement Marking, 4" White	96,242	Ft
633E3005	Durable Pavement Marking, 4" Yellow	18,712	Ft
633E5100	Grooving for Durable Pavement Marking, 4"	114,954	Ft
634E0110	Traffic Control Signs	2,613	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0265	Type 3 Barricade, 6' Double Sided	24	Each
634E0285	Type 3 Barricade, 8' Double Sided	86	Each
634E0420	Type C Advance Warning Arrow Board	1	Each
634E0600	4" Temporary Pavement Marking Tape Type I	600	Ft
634E0630	Temporary Pavement Marking	0.1	Mile
634E1002	Detour Signing	1,070.5	SqFt

INDEX OF SHEETS

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

Surfacing – Section F

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3230	Grade Staking	9.337	Mile
009E3240	Graded Centerline Staking	9.337	Mile
009E3250	Miscellaneous Staking	9.337	Mile
009E3300	Three Man Survey Crew	40.0	Hour
110E0320	Remove Concrete Gutter	77	Ft
110E1100	Remove Concrete Pavement	7,384.6	SqYd
110E1110	Remove Concrete Approach Pavement	313.6	SqYd
110E1130	Remove Concrete Driveway Pavement	154.7	SqYd
120E0010	Unclassified Excavation	941	CuYd
120E0100	Unclassified Excavation, Digouts	233	CuYd
120E6200	Water for Granular Material	427.9	MGal
210E1005	Surface Preparation	0.356	Mile
210E2000	Shoulder Shaping	17.858	Mile
260E1010	Base Course	33,562.7	Ton
320E0006	PG 64-22 Asphalt Binder	770.0	Ton
320E1050	Class E Asphalt Concrete	13,420.0	Ton
320E1200	Asphalt Concrete Composite	20.0	Ton
320E3000	Compaction Sample	3	Each
320E5010	Saw and Seal Shoulder Joint	96,602	Ft
330E0010	MC-70 Asphalt for Prime	108.0	Ton
330E0100	SS-1h or CSS-1h Asphalt for Tack	21.3	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	17.4	Ton
330E2000	Sand for Flush Seal	22.4	Ton
332E0010	Cold Milling Asphalt Concrete	663	SqYd
380E0070	9" Nonreinforced PCC Pavement	7,141.2	SqYd
380E1500	PCC Overlay, Furnish	30,468.4	CuYd
380E1570	7" PCC Overlay, Placement	146,669.3	SqYd
380E3020	6" PCC Driveway Pavement	231.5	SqYd
380E3540	8" PCC Approach Pavement	316.5	SqYd
380E6000	Dowel Bar	84,766	Each
380E6110	Insert Steel Bar in PCC Pavement	96	Each
380E6500	Planing PCC Pavement	266.7	SqYd
600E0300	Type III Field Laboratory	1	Each
650E1090	Type F69 Concrete Curb and Gutter	1,063	Ft
650E4690	Type P9 Concrete Gutter	265	Ft
831E1500	Geotextile Bond Breaker Fabric	251,433	SqYd
900E0010	Refurbish Single Mailbox	23	Each
900E0012	Refurbish Double Mailbox	3	Each

Permanent Signing – Section S

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E0130	Remove Traffic Sign	64	Each
110E7150	Remove Sign for Reset	3	Each
632E1320	2.0"x2.0" Perforated Tube Post	759.0	Ft
632E1340	2.5"x2.5" Perforated Tube Post	28.0	Ft
632E2022	4"x4" White Delineator Back to Back with 1.12 Lb/Ft Post	182	Each
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	325.0	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	271.3	SqFt
632E3500	Reset Sign	3	Each

Erosion and Sediment Control – Section D

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	2.0	CuYd
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0251	Special Permanent Seed Mixture 1	936	Lb
732E0100	Mulching	72.0	Ton
734E0154	12" Diameter Erosion Control Wattle	300	Ft
734E0165	Remove and Reset Erosion Control Wattle	150	Ft
900E1320	Construction Entrance	2	Each

SPECIFICATIONS

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

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0212(162)380	A2	A2

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.

The Contractor shall 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 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 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 proposed 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 historic or 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.