

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
DAKOTA	010-151, 020-151 & 037-151	1	9
Plotting [)ate:		

INDEX OF SHEETS

- Sheet 1 Title Sheet and Layout Map
 - Sheet 2-3 Estimate of Quantities and

Environmental Commitment Notes

- Sheet 4 Table of Quantities and Project Summary Table
 - Plan Notes
- Sheet 6-8 SWPPP
- Sheet 9 Itemized List for Traffic Control and Standard Plates

ESTIMATE OF QUANTITIES

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
120E0600	Contractor Furnished Borrow	8,208	CuYd
230E0020	Placing Contractor Furnished Topsoil	8,483	CuYd
634E0010	Flagging	130.0	Hour
634E0020	Pilot Car	65.0	Hour
634E0100	Traffic Control	714	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
730E0100	Cover Crop Seeding	5.0	Bu
730E0251	Special Permanent Seed Mixture 1	474	Lb
732E0100	Mulching	31.6	Ton

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2004 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 B4: BALD EAGLE

Bald eagles are known to occur in this area.

Action Taken/Required:

If a nest is observed within one mile of the project site, notify the Project Engineer immediately so that he/she can consult with the Environmental Office for an appropriate course of action.

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://www.sddot.com/business/environmental/stormwater/Default.aspx

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

EPA: http://cfpub.epa.gov/npdes/home.cfm?program_id=6

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 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:

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".

Concrete and asphalt concrete debris may be stockpiled within view of 2. 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.

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
SOUTH DAKOTA	010-151,020-151 & 020-151	2	9
Plotting [Date:		

after the award of the contract. Work may not begin on the project until this

Construction and/or demolition debris may not be disposed of within the State

COMMITMENT H: WASTE DISPOSAL SITE (CONTINUED)

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 gualified 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.

SWPPP Information

							Total		
						Area	Project		
	BEGIN	END			Major Receiving Body	Disturbed	Area	Project B	egin Point
HWY	MRM	MRM	DITCH	LOCATION	of Water	(Acres)	(Acres)	Latitude	Longitude
10	285.5	285.6	L & R	East of US281	Local Potholes	0.3	2.8	45.763641	-98.450778
10	286.7	287.2	L & R	East of US281	Local Potholes	1.0	14.7	45.763473	-98.427335
10	289.4	289.5	L & R	East of US281	Local Potholes	0.5	3.4	45.763136	-98.371184
10	294.2	294.3	L	Sand Lake	Sand Lake Reservoir	0.2	2.3	45.762921	-98.270007
10	297.4	297.6	L & R	East of Houghton	Local Potholes	2.3	12.1	45.762796	-98.206901
10	302.8	303.5	L & R	Between the SD37s	Local Potholes	3.0	17.3	45.791855	-98.130314
20	319.4	320.0	L & R	East of Northville	Big Slough Creek	2.1	12.0	45.158767	-98.559748
37	206.0	206.5	L & R	South of Groton	Antelope Creek	1.0	10.1	45.42297	-98.103483
37	233.8	234.1	L & R	North of SD10	Local Potholes	1.1	6.9	45.794888	-98.145087
37	234.3	234.5	L	North of SD10	Local Potholes	0.5	5.5	45.802881	-98.145044
37	235.5	236.1	L & R	North of SD10	Local Potholes	2.0	13.0	45.822003	-98.145039
37	236.3	236.8	L & R	North of SD10	Local Potholes	1.8	11.6	45.832783	-98.144991
					Total	15.8	111.8		

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
SOUTH DAKOTA	010-151,020-151 & 020-151	3	9
Plotting (Date:		

														STATE OF SOUTH DAKOTA	PRDJECT	SHEET NO.	TOTAL SHEETS
														Plotting	l Date:	4	9
							_		o							I	
								able of	Quantities							l	
									Depth of Contractor			Placing C	ontractor			l	
									Furnished Borrow	Contracto	r Furnished	Furnishe	d Topsoil			l	
	BEGIN	END			Lengt	:h (Ft)	Widt	:h (Ft)	(Inches)	Borrov	v (CuYd)	(Cu	Yd)	Co	mments	l	
HWY	MRM	MRM	DITCH	LOCATION	Left	Right	Left	Right		Left	Right	Left	Right			l	
10	285.5	285.6	L & R	East of US281	615	615	12	12	4	90	90	90	90			l	
10	286.7	287.2	L & R	East of US281	3200	2882	7	7	-	-	-	274	247	Place from edg	e of asphalt to 7' out	l	
10	289.4	289.5	L & R	East of US281	595	743	15	15	8	218	272	109	136			l	
10	294.2	294.3	L	Sand Lake	495	-	20	-	4	121	-	121	-			l	
10	297.4	297.6	L & R	East of Houghton	2637	2637	19	19	4	612	612	612	612			l	
10	302.8	303.5	L & R	Between the SD 37s	3776	3776	17	18	4	785	831	785	831			l	
								Total		1826	1806	1991	1916			l	
20	319.4	320.0	L & R	East of Northville	3493	3493	13	13	4	555	555	555	555			l	
								Total		555	555	555	555			l	
37	206.0	206.2	L	South of Groton	713	-	13	-	4	113	-	113	-			l	
37	206.0	206.5	R	South of Groton	-	2946	-	12	4	-	432	-	432			l	
37	233.8	234.1	L & R	North of SD 10	1508	1508	16	17	4	295	313	295	313			l	
37	234.3	234.5	L	North of SD 10	1196	-	17	-	4	249	-	249	-			1	
37	235.5	236.1	L	North of SD 10	2830	-	17	-	3	588	-	588	-			1	
37	235.7	236.1	R	North of SD 10	-	2365	-	17	4	-	491	-	491			1	
37	236.3	236.8	L & R	North of SD 10	2518	2518	16	16	4	492	492	492	492			I	
									Total	1737	1729	1737	1729				
									Project Total	4118	4090	4283	4200				

Project Total 4118 4 Total Contractor Furnished Borrow Total Contractor Furnished Topsoil

8208 8483

		Contractor	Placing Contractor			Traffic	Traffic Control		Special Permanent	
	Mobilization	Furnished	Furnished Topsoil	Flagging	Pilot Car	Control	Miscellaneous	Cover Crop	Seed Mixture 1	Mulching
Project	(Lump Sum)	Borrow (CuYd)	(CuYd)	(Hour)	(Hour)	(Unit)	(Lump Sum)	Seeding (Bu)	(Lb)	(Ton)
010-151	Lump Sum	3632	3907	60	30	238	Lump Sum	2	193	14.6
020-151	Lump Sum	1110	1110	10	5	238	Lump Sum	1	55	4.2
037-151	Lump Sum	3466	3466	60	30	238	Lump Sum	2	169	12.8
Total	Lump Sum	8208	8483	130	65	714	Lump Sum	5	417	31.6

GENERAL NOTES

The Contractor shall seat the existing riprap prior to placement of Contractor Furnished Borrow and Contractor Furnished Topsoil. Seating of the riprap shall be incidental to the contract unit price per CuYd for, Placing Contractor Furnished Topsoil. The Contractor Furnished Borrow shall be placed first at the depth and width specified in the Table of Quantities.

Project limits and width shall be identified in the field by the Engineer. The Contractor shall notify the Engineer at least 2 working days in advance of starting any work in any location on the project.

TRAFFIC CONTROL

One lane of traffic shall be maintained at all times.

Storage of vehicles and equipment shall be as near the right-of-way line as possible. Contractor's employees should mobilize at a location off the right-ofway and arrive at the work sites in a minimum number of vehicles necessary to perform the work. Indiscriminate driving and parking of vehicles within the rightof-way will not be permitted. Any damage to the vegetation, surfacing, embankment, delineators and existing signs resulting from such indiscriminate use shall be repaired and/or restored by the Contractor, at no expense to the State, and to the satisfaction of the Engineer.

Work activities during non-daylight hours are subject to prior approval.

The bottom of signs on portable or temporary supports shall not be less than seven feet above the pavement in urban areas and one foot above the pavement in rural areas. Portable sign supports may be used as long as the duration is less than 3 days. If the duration is more than 3 days the signs shall be on fixed location, ground mounted, breakaway supports.

The Contractor shall provide documentation that all breakaway sign supports comply with FHWA NCHRP Report 350 or MASH crash-worthy requirements. The Contractor shall provide installation details at the preconstruction meeting for all breakaway sign support assemblies.

The signs provided are for one set up per project and the Contractor shall move them from site to site. If the Contractor elects to work on more than one site at a time, they shall be responsible for the additional signing at their own expense.

CONTRACTOR FURNISHED BORROW

The Contractor shall provide a suitable site for Contractor furnished borrow material. The Contractor is responsible for obtaining all required permits and clearances for the borrow site. The borrow material shall be approved by the Engineer. The plans quantity for "Contractor Furnished Borrow" as shown in the Estimate of Quantities will be the basis of payment for this item unless changes are ordered and approved by the Engineer.

The Contractor Furnished Borrow shall be worked into the voids in the riprap to prevent any further loose.

Restoration of the Contractor furnished borrow site shall be the responsibility of the Contractor.

Compaction shall be to the satisfaction of the Engineer.

PLACING CONTRACTOR FURNISHED TOPSOIL

The Contractor will be required to furnish and place 4 inches of topsoil on roadway inslopes as specified in the Table of Quantities.

All costs to furnish and place the topsoil shall be incidental to the contract unit price per cubic yard for "Placing Contractor Furnished Topsoil". The plans quantity for "Placing Contractor Furnished Topsoil" as shown in the Estimate of Quantities will be the basis of payment for this item.

The topsoil shall be approved by the Engineer prior to placement.

MYCORRHIZAL INOCULUM

Mycorrhizal inoculum shall consist of mycorrhizal fungi spores and mycorrhizal fungi-infected root fragments in a solid carrier. The carrier may include organic materials, calcinated clay, or other materials consistent with application and good plant growth. The supplier shall provide certification of the fungal species claimed and the live propagule count. The inoculum shall include the following fungal species:

Glomus intraradices	25%
Glomus aggregatu	25%
Glomus mosseae	25%
Glomus etunicatum	25%

All seed shall be inoculated by the seed supplier with a minimum of 100,000 live propagules of mycorrhizal fungi per acre. All costs of inoculating the seed shall be incidental to the contract unit price per pound for the corresponding permanent seed mixture.

The mycorrhizal inoculum shall be from the list below or an approved equal:

Product MycoApply

Manufacturer Mycorrhizal Applications, Inc.

Grants Pass, OR Phone: 1-866-476-7800 http://www.mycorrhizae.com/

DRILLS

In addition to the drills specified in Section 730 of the Specifications, other types of drills including no-till drills will be allowed as long as they have baffles, partitions, agitators, or augers which keep the seed distributed throughout the seed box and the seed is planted at a depth of 1/4" to 1/2".

PERMANENT SEEDING

project limits.

All permanent seed shall be planted in the topsoil at a depth of $\frac{1}{4}$ " to $\frac{1}{2}$ ".

All seed broadcast must be raked or dragged in (incorporated) within the top 1/4" to $\frac{1}{2}$ " of topsoil when possible. This requirement may be waived by the Engineer during construction when raking or dragging is deemed not feasible by conventional methods.

The varieties listed for seed mixtures are preferred varieties.

Native harvest seed will be allowed.

Special Permanent Seed Mixture 1 shall consist of the following:

Grass Spec

Intermediate Wheatgrass Western Wheato

Switchgrass

Indiangrass

Big Bluestem

Oats or Spring V April through July Winter Wheat: A through Novemb

COVER CROP SEEDING

Cover crop seeding may be used on this project as a temporary erosion control measure. The actual limits and use of cover crop seeding shall be determined by the Engineer during construction.

MULCHING (GRASS HAY OR STRAW)

Bales with noxious weed contamination will be rejected and the Contractor will be required to remove the contaminated bales from the project.

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
SOUTH DAKOTA	010-151,020-151 & 020-151	5	9
Plotting [)ate:		

The areas to be seeded consist of all newly graded areas within the

cies	Variety	Pure Live Seed (PLS) (Pounds/Acre)
	Chief, Oahe, Slate	7
grass	Arriba, Flintlock, Rodan, Rosana	4
	Dacotah, Forestburg, Nebraska 28, Pathfinder, Summer, Sunburst, Trailblazer	3
	Holt, Tomahawk	3
	Bison, Bonilla, Champ, Pawnee, Sunnyview	3
Vheat: y; lugust per		10
	Total:	30

STORM WATER POLLUTION PREVENTION PLAN CHECKLIST

(The numbers right of the title headings are reference numbers to the GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

SITE DESCRIPTION (4.2 1)

- Project Limits: See Title Sheet (4.2 1.b)
- Project Description: See Title Sheet (4.2 1.a.)
- > Site Map(s): See Title Sheet and Plans (4.2 1.f. (1)-(6))
- > Major Soil Disturbing Activities (check all that apply)
 - Clearing and grubbing
 - Excavation/borrow
 - Grading and shaping
 - Filling
 - Cutting and filling .
 - Other (describe): •
- > Total Project Area 111.8 Acres (4.2 1.b.)
- > Total Area To Be Disturbed 16 Acres (4.2 1.b.)
- Existing Vegetative Cover (5%)
- Soil Properties: AASHTO Soil or USDA-NRCS Soil Series \geq Classification A-6 (4.2 1. d.)
- > Name of Receiving Water Body/Bodies Local Potholes, Sand Lake Reservoir, Big Slough Creek & Antelope Creek (4.2 1.e.)

ORDER OF CONSTRUCTION ACTIVITIES (4.2 1.c.)

(Stabilization measures shall be initiated as soon as possible, but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Initiation of final or temporary stabilization may exceed the 14-day limit if earth disturbing activities will be resumed within 21 days.)

- Install Traffic Control
- Seat Riprap \geq
- Place Contractor Furnish Borrow \geq
- Place Contractor Furnished Topsoil \geq
- > Install Permanent Seed

EROSION AND SEDIMENT CONTROLS (4.2 2.a.(1)(a)-(f)) (Check all that apply)

- Stabilization Practices (See Detail Plan Sheets)
 - Temporary Seeding (Cover Crop Seeding)
 - Permanent Seeding .
 - Soddina
 - Planting (Woody Vegetation for Soil Stabilization)
 - Mulching (Grass Hay or Straw) .
 - Hvdraulic Mulch (Wood Fiber Mulch) .
 - Soil Stabilizer .
 - Bonded Fiber Matrix .
 - Erosion Control Blankets or Mats
 - Vegetation Buffer Strips
 - . Roughened Surface (e.g. tracking)
 - . Dust Control
 - Other:
- > Structural Temporary Erosion and Sediment Controls
 - Silt Fence

- Floating Silt Curtain
- Straw Bale Check
- Temporary Berm
- Temporary Slope Drain
- Straw Wattles or Rolls
- Turf Reinforcement Mat
- Rip Rap
- Gabions
- Rock Check Dams
- Sediment Traps/Basins
- Inlet Protection
- Outlet Protection
- Surface Inlet Protection (Area Drain)
- Curb Inlet Protection
- Stabilized Construction Entrances
- Entrance/Exit Equipment Tire Wash
- Interceptor Ditch
- Concrete Washout Area
- Temporary Diversion Channel
- Work Platform
- Temporary Water Barrier
- Temporary Water Crossing
- Other:

Wetland Avoidance \geq

Will construction and/or erosion and sediment controls impinge on regulated wetlands? Yes No If yes, the structural and erosion and sediment controls have been included in the total project wetland impacts and have been included in the 404 permit process with the USACE.

- Storm Water Management (4.2 2.b., (1) and (2)) \geq
- Storm water management will be handled by temporary controls outlined in "EROSION AND SEDIMENT CONTROLS" above, and any permanent controls needed to meet permanent storm water management needs in the post construction period. Permanent controls will be shown on the plans and noted as permanent.
- Other Storm Water Controls (4.2 2.c., (1) and (2))
- Waste Disposal

All liquid waste materials will be collected and stored in sealed metal containers approved by the project engineer. All trash and construction debris from the site will be deposited in the approved containers. Containers will be serviced as necessary, and the trash will be hauled to an approved disposal site or licensed landfill. All onsite personnel will be instructed in the proper procedures for waste disposal, and notices stating proper practices will be posted in the field office. The general contractor's representative responsible for the conduct of work on the site will be responsible for seeing waste disposal procedures are followed.

Hazardous Waste

All hazardous waste materials will be disposed of in a manner specified by local or state regulations or by the manufacturer. Site personnel will be instructed in these practices, and the individual designated as the contractor's on-site representative will be responsible for seeing that these practices are followed.

Sanitary Waste

Portable sanitary facilities will be provided on all construction sites. Sanitary waste will be collected from the portable units in a timely manner by a licensed waste management contractor or as required by any local regulations.

.

Non-Storm Water Discharges (3.0)

- \geq
- \succ

Materials Inventory (4.2. 2.c.(2))

- \geq
- \geqslant Detergents Paints
- \geqslant Metals ≻

 \geqslant

 \geq

 \geq

 \geq

- ≻
- \geq \geq

Doow

Cure

Other:

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
DAKOTA	010-151,020-151 & 020-151	6	9
Plotting (Date:		

♦ Maintenance and Inspection (4.2 3, and 4.2 4.) > Maintenance and Inspection Practices

Inspections will be conducted at least one time per week and after a storm event of 0.50 inches or greater.

• All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report. Silt fence will be inspected for depth of sediment and for tears in order to ensure the fabric is securely attached to the posts and that the posts are well anchored. Sediment buildup will be removed from the silt fence when it reaches $\frac{1}{3}$ of the height of the silt fence. Sediment basins and traps will be checked. Sediment will be removed when depth reaches approximately 50 percent of the structure's capacity, and at the conclusion of the construction. Check dams will be inspected for stability. Sediment will be removed when depth reaches $\frac{1}{2}$ the height of the dam. All seeded areas will be checked for bare spots, washouts, and vigorous growth free of significant weed infestations. Inspection and maintenance reports will be prepared on form DOT 298 for each site inspection, this form will also be used to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents. The SDDOT Project Engineer and contractor's site superintendent are responsible for inspections. Maintenance, repair activities are the responsibility of the contractor. The SDDOT Project Engineer will complete the inspection and maintenance reports and distribute copies per the distribution instructions on DOT 298.

The following non-storm water discharges are anticipated during the course of this project (check all that apply).

Discharges from water line flushing.

Pavement wash-water, where no spills or leaks of toxic or

hazardous materials have occurred.

Uncontaminated ground water associated with dewatering activities.

The following materials or substances are expected to be present on the site during the construction period. These materials will be handled as noted under the headings "EROSION AND SEDIMENT CONTROLS" and "SPILL PREVENTION" (check all that apply).

Concrete and Portland Cement

Bituminous Materials Petroleum Based Products Cleaning Solvents

Texture Chemical Fertilizers

Spill Prevention (4.2 2.c.(2))

> Material Management

- Housekeeping
- Only needed products will be stored on-site by the contractor.
- Except for bulk materials the contractor will store all materials under cover and in appropriate containers.
- Products must be stored in original containers and labeled.
- Material mixing will be conducted in accordance with the manufacturer's recommendations.
- When possible, all products will be completely used before properly disposing of the container off site.
- The manufacturer's directions for disposal of materials and containers will be followed.
- The contractor's site superintendent will inspect materials storage areas regularly to ensure proper use and disposal.
- Dust generated will be controlled in an environmentally safe manner.
- Vegetation areas not essential to the construction project will be preserved and maintained as noted on the plans.
- Hazardous Materials
 - Products will be kept in original containers unless the container • is not resealable.
 - Original labels and material safety data sheets will be retained in a safe place to relay important product information.
 - If surplus product must be disposed of, manufacturer's label directions for disposal will be followed.
 - Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants will be conducted on an impervious surface and under cover during wet weather to prevent the release of contaminants onto the ground.
 - Wheel wash water will be collected and allowed to settle out • suspended solids prior to discharge. Wheel wash water will not be discharged directly into any storm water system or storm water treatment system.
 - Potential pH-modifying materials such as: bulk cement, cement kiln dust, fly ash, new concrete washings, concrete pumping, residuals from concrete saw cutting (either wet or dry), and mixer washout waters will be collected on site and managed to prevent contamination of storm water runoff.

Product Specific Practices (6.8)

Petroleum Products .

All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled.

Fertilizers •

> Fertilizers will be applied only in the amounts specified by the SDDOT. Once applied, fertilizers will be worked into the soil to limit the exposure to storm water. Fertilizers will be stored in an

enclosed area. The contents of partially used fertilizer bags will be transferred to sealable containers to avoid spills.

Paints

All containers will be tightly sealed and stored when not required for use. The excess will be disposed of according to the manufacturer's instructions and any applicable state and local regulations.

Concrete Trucks

Contractors will provide designated truck washout areas on the site. These areas must be self contained and not connected to any storm water outlet of the site. Upon completion of construction washout areas will be properly stabilized.

Spill Control Practices (4.2 2 c.(2))

In addition to the previous housekeeping and management practices, the following practices will be followed for spill prevention and cleanup if needed.

- For all hazardous materials stored on site, the manufacturer's recommended methods for spill clean up will be clearly posted. Site personnel will be made aware of the procedures and the locations of the information and cleanup supplies.
- Appropriate cleanup materials and equipment will be maintained by the contractor in the materials storage area on-site. As appropriate, equipment and materials may include items such as brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for clean up purposes.
- All spills will be cleaned immediately after discovery and the materials disposed of properly.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- After a spill a report will be prepared describing the spill, what • caused it, and the cleanup measures taken. The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring, as well as clean up instructions in the event of reoccurrences.
- The contractor's site superintendent, responsible for day-to-day operations, will be the spill prevention and cleanup coordinator. The contractor is responsible for ensuring that the site superintendent has had appropriate training for hazardous materials handling, spill management, and cleanup.

> Spill Response (4.2 2 c.(2))

The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize migration into storm water runoff and conveyance systems. If the release has impacted on-site storm water, it is critical to contain the released materials on-site and prevent their release into receiving waters. If a spill of pollutants threatens storm water or surface water at the site, the spill response procedures outlined below must be implemented in a timely manner to prevent the release of pollutants.

- The contractor's site superintendent will be notified immediately when a spill or the threat of a spill is observed. The superintendent will assess the situation and determine the appropriate response.
- If spills represent an imminent threat of escaping erosion and sediment controls and entering receiving waters, personnel will be directed to respond immediately to contain the release and notify the superintendent after the situation has been stabilized.

- site.

Spill Notification

- safetv.

- gallons).

To report a release or spill, call DENR at 605-773-3296 during regular office hours (8 a.m. to 5 p.m. Central time). To report the release after hours, on weekends or holidays, call State Radio Communications at 605-773-3231. Reporting the release to DENR does not meet any obligation for reporting to other state, local, or federal agencies. Therefore, the responsible person must also contact local authorities to determine the local reporting requirements for releases. DENR recommends that spills also be reported to the National Response Center at (800) 424-8802.

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
DAKOTA	010-151,020-151 & 020-151	7	9
Plotting [)ate:		

 Spill kits containing appropriate materials and equipment for spill response and cleanup will be maintained by the contractor at the

If oil sheen is observed on surface water (e.g. settling ponds, detention ponds, swales), action will be taken immediately to remove the material causing the sheen. The contractor will use appropriate materials to contain and absorb the spill. The source of the oil sheen will also be identified and removed or repaired as necessary to prevent further releases.

If a spill occurs the superintendent or the superintendent's designee will be responsible for completing the spill reporting form and for reporting the spill to SD DENR.

Personnel with primary responsibility for spill response and clean up will receive training by the contractor's site superintendent or designee. The training must include identifying the location of the spill kits and other spill response equipment and the use of spill response materials.

Spill response equipment will be inspected and maintained as necessary to replace any materials used in spill response activities.

In the event of a spill, the contractor's site superintendent will make the appropriate notification(s), consistent with the following procedures:

> A release or spill of a regulated substance (includes petroleum and petroleum products) must be reported to DENR immediately if any one of the following conditions exists:

• The discharge threatens or is in a position to threaten the waters of the state (surface water or ground water).

The discharge causes an immediate danger to human health or

The discharge exceeds 25 gallons.

The discharge causes a sheen on surface water.

The discharge of any substance that exceeds the ground water quality standards of ARSD (Administrative Rules of South Dakota) chapter 74:51:01.

The discharge of any substance that exceeds the surface water quality standards of ARSD chapter 74:51:01.

The discharge of any substance that harms or threatens to harm wildlife or aquatic life.

 The discharge of crude oil in field activities under SDCL (South Dakota Codified Laws) chapter 45-9 is greater than 1 barrel (42

Construction Changes (4.4)

When changes are made to the construction project that will require alterations in the temporary erosion controls of the site, the Storm Water Pollution Prevention Plan (SWPPP) will be amended to provide appropriate protection to disturbed areas, all storm water structures, and adjacent waters. The SDDOT Project Engineer will modify the SWPPP plan (DOT 298) and drawings to reflect the needed changes. Copies of changes will be routed per DOT 298. Copies of forms and the SWPPP will be retained in a designated place for review over the course of the project.

♦ CERTIFICATIONS

> Certification of Compliance with Federal, State, and Local Regulations

The Storm Water Pollution Prevention Plan (SWPPP) for this project reflects the requirements of all local municipal jurisdictions for storm water management and sediment and erosion control as established by ordinance, as well as other state and federal requirements for sediment and erosion control plans, permits, notices or documentation as appropriate.

> South Dakota Department of Transportation

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that gualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Ton hall

Authorized Signature (See the General Permit, Section 6.7.1.C.)

> Prime Contractor

This section is to be executed by the General Contractor after the award of the contract. This section may be executed any time there is a change in the Prime Contractor of the project.

I certify under penalty of law that this document and all attachments will be revised or maintained under my direction or supervision in accordance with a system designed to assure that gualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Signature

✤ CONTACT INFORMATION

- > Contractor Information:
 - Prime Contractor Name:
 - Contractor Contact Name:
 - Address: _____

 - City: _____State: ____Zip: _____
 - Office Phone: Field:
 - Cell Phone: Fax:
- Erosion Control Supervisor
 - Name:
 - Address:
- City: State: Zip:
- Office Phone: ______Field: _____
- Cell Phone: ______Fax: _____
- SDDOT Project Engineer
 - Name:
 - Business Address: ______
 - Job Office Location: _____
 - City: _____State: ____Zip: _____
 - Office Phone: ______Field: ______
 - Cell Phone: Fax:
- > SD DENR Contact Spill Reporting
 - Business Hours Monday-Friday (605) 773-3296
 - Nights and Weekends (605) 773-3231
- SD DENR Contact for Hazardous Materials.
 - (605) 773-3153

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS		
DAKOTA	010-151,020-151 & 020-151	8	9		
Plotting Date:					

> National Response Center Hotline (800) 424-8802.

Posted	Spacing of	Spacing of
Speed	Advance Warning	Channelizing
Prior to	Signs	Devices
Work	(Feet)	(Feet)
(M.P.H.)	(A)	(G)
0 - 30	200	25
35 - 40	350	25
45 - 50	500	50
55	750	50
60 - 65	1000	50

Flagger

Channelizing Device

For low-volume traffic situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger may be used.

The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (I hour or less).

For tack and/or flush seal operations, when flaggers are not being used, the FRESH OIL sign (W21-2) shall be displayed in advance of the liquid asphalt areas.

Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

The channelizing devices shall be drums or 42" cones.

Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.

END END BOAD WORK	_		CSO-S KOVD MOKK END
-------------------------	---	--	---------------------------

Channelizing devices and flaggers shall be used at intersecting roads to control intersecting road traffic as required.

The buffer space should be extended so that the two-way traffic taper is placed before a horizontal or vertical curve to provide adequate sight distance for the flagger and queue of stopped vehicles.

The length of A may be adjusted to fit field conditions.

SDDOT	GUID LANE
	S D D O T

ITEMIZED LIST FOR TRAFFIC CONTROL

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
G20-2	36" x 18"	END ROAD WORK	2	17	34
W20-1	48" x 48"	ROAD WORK #### FT. OR AHEAD	2	34	68
W20-4	48" x 48"	ONE LANE ROAD #### FT. OR AHEAD	2	34	68
W20-7	48" x 48"	FLAGGER (SYMBOL)	2	34	68
	TOTAL UNITS		238		

