

### **Department of Transportation**

**Pierre Region Office** 

104 S. Garfield

Pierre, South Dakota 57501-5405 605/773-3464

FAX: 605/773-6215

July 10, 2008

RE: 090W-391 & 047-392 PCN i0VM & i0XS

Box Culvert Apron Repair, Pipe Repair, Erosion Repair and Outlet

**Protection** 

**Lyman & Gregory Counties** 

TO: INTERESTED BIDDERS

The South Dakota Department of Transportation (SDDOT), Pierre Region Office, 104 S. Garfield, Pierre, South Dakota 57501, desires to solicit bids for the above referenced project.

A copy of the plans and the proposals may be downloaded from the SDDOT web site at the following location: <a href="http://www.sddot.com/pe/projdev/bidlet\_lettings\_regional.asp">http://www.sddot.com/pe/projdev/bidlet\_lettings\_regional.asp</a> or may be obtained in paper format by contacting the Pierre Region office at 605-773-3464. Contractors that didn't receive this invitation by mail, but downloaded the bidding documents from the website, are encouraged to let the Region Office know of their intent to bid on this project so that we can get them added to the plan holders list.

Any addenda will be posted on the Pierre regional letting site no later than 5:00 p.m. on Wednesday, July 23, 2008. It will be the Contractor's responsibility to verify that no addenda have been posted prior to submitting bids. Every addenda posted on the regional letting site will have a cover sheet attached to it that the contractor will be required to include with their bid. Failure to incorporate changes made through addenda and not submitting all cover sheets will result in an incomplete bid which will subsequently be rejected.

Sealed bids for the contract will be accepted until 2:00 P.M. (C.D.T.) on Wednesday, July 30, 2008, and will be opened at that time in the Pierre Region Office. Bids must be received in an envelope with "Box Culvert Apron Repair, Pipe Repair, Erosion Repair and Outlet Protection" written on the outside.

A bid bond will not be required on this contract; however, at the time of execution of the contract, the successful bidder shall furnish a performance bond in a sum equal to the full amount of the contract. State law requires that all performance bonds be written by resident agents or be counter signed by a resident agent. Note: A cashiers check, money order or other monetary instrument in the total amount of the contract, made out

to and under the full control of the Department is acceptable in lieu of a performance bond. Such bond shall remain in effect for not less than one year after date of acceptance of the completed contract by the Department.

A Certificate of Insurance will be required from the successful bidder prior to beginning work on this project.

The Department of Transportation hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on grounds of race, color, sex, religion or national origin in consideration of an award.

The Department of Transportation reserves the right to reject any and all bids. No faxed bids will be accepted.

For bids in excess of \$99,999.99, special bidder qualification requirements apply. Refer to the proposal for details.

### THE CONTRACTORS SIGNATURE ON THE DOT-123 FORMS MUST BE NOTARIZED TO CONSITUTE A LEGAL BID.

Contractors are encouraged to include completed "Participation by Minority Contractors", "Contractor's Affidavit/Declaration" and "Fuel Adjustment Affidavit" forms when you submit your bid. This is not a requirement but it will help expedite the process of awarding the contract.

Any person engaged in highway construction work in the State of South Dakota must obtain a motor fuel highway contractor tax license.

Please verify that all required information is complete prior to mailing bid documents.

DEPARTMENT OF TRANSPORTATION

John C. Forman, P.E. Pierre Region Engineer

cc: J. Humphrey - Operations

J. Koch – Pierre Region

D. Voorhes – Civil Rights

D. Sherman – Winner Area

Project File

### SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION CONTRACT PROPOSAL

		PROJECT	Г	MAINT	CONTROL			BEGIN	END
CODE	PRE	ROUTE	AGR	UNIT	REFERENCE	AFE	<b>FUNCTION</b>	MRM	MRM
		090W		391		i0vm	2801	221.6	221.6
		47		392		i0xs	2801	32.2	55.2

		47	392		i0xs	2801	32.2		55.2		
CITY AND/OR COUNTY: Lyman & Gregory Counties							BUDGET SOURCE	:	Fiscal Year 2009 Budget		
FINALS ENGINEER REVIEW REQUIRED:						☐ YES	✓ NO				
	<b>REGION M</b>	IATERIA	LS CERTIFIC	ATION REQU	IRED:	✓ YES	■ NO				
	CERTIFIE	INSPEC	CTORS/TEST	ERS REQUIRE	ED:	✓ YES	■ NO				
TO BE INSTALLED ON CM&P:							□ NO				
TYPE, PURI	POSE AND	LOCATI	ON OF WOR	C: Box Culvert	Apron R	epair, Pipe	Repair, Erosion Repa	air and	Outlet Protection	on	
			Е	STIMATE OF	QUAN	ITITIES AN	ND COST				
BID ITEM				ITEM			OHANTITY	LINIT	UNIT PRICE	AMOUNT	
NUMBER				I I LIVI			QUANTITI	ONT	ONIT PRICE	ANIOUNT	
009F0010	Mobilization	n	•			•	Lump Sum	LS			

BID ITEM	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
NUMBER			0	OIIII I IIIOE	7111100111
	Mobilization	Lump Sum	LS		
	Remove Silt Fence	125	Ft		
	Remove Pipe for Reset	48	Ft		
	Remove Pipe End Section for Reset	21	Each		
	Contractor Furnished Borrow	885	CuYd		
250E0010	Incidental Work	Lump Sum	LS		
260E2090	Gravel Cushion, State Furnished	25	Ton		
450E9000		48	Ft		
450E9001	Reset Pipe End Section	21	Each		
460E0120	Class A45 Concrete, Box Culvert	9.9	CuYd		
460E0300	Breakout Structural Concrete	25.9	CuYd		
	Reinforcing Steel	749	Lb		
634E0010		100	Hour	\$21.74	\$2, 174.00
634E0100	Traffic Control	782	Unit		
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS		
634E0420	Type C Advance Warning Arrow Panel	1	Each		
700E0210	Class B Riprap	554	Ton		
730E0210	Type F Permanent Seed Mixture	21	Lb		
734E0131	Type 1 Turf Reinforcement Mat	1,400	SqYd		
734E0604	High Flow Silt Fence	500	Ft		
734E0610	Mucking Silt Fence	20	CuYd		
734E0620	Repair Silt Fence	125	Ft		
831E0110	Type B Drainage Fabric	731	SqYd		
•	•			TOTAL	

#### **CONTRACTOR'S PROPOSAL STATEMENT**

The undersigned does hereby agree to furnish the labor and/or material in the quantities, at the unit price, for the purpose, in the place and in accordance with attached provisions upon approval of this Proposal by the State Transportation Commission. This document becomes the Contract when signed by the Contractor and a Department of Transportation Representative. The Contractor agrees to provide services in compliance with the Americans with Disabilities Act of 1990. The Contractor agrees to provide a certificate of insurance prior to commencing work, for liability coverage for the duration of the work as per the current edition of the SDDOT Standard Specifications for Roads and Bridges.

PROPOSED START DATE	OVERALL COMPLETION DATE 15-May-09					
SUBSCRIBED AND SWORN TO BEFORE ME THE	SIGNATURE					
, DAY OF, 20	COMPANY					
	ADDRESS					
NOTARY - My Commission Expires	FEDERAL TAX ID NUMBER					

DOT-123 (5/05) 2 of 2

# SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION CONTRACT PROPOSAL

	PROJECT MAINT		PROJECT		CONTROL			BEGIN	END
CODE	PRE	ROUTE	AGR	UNIT	REFERENCE	AFE	<b>FUNCTION</b>	MRM	MRM
		090W		391		i0vm	2801	221.6	221.6
		47		392		i0xs	2801	32.2	55.2

<b>RECOMMENDED FOR APPI</b>	ROVAL:				
		CONSTRUCTION	NEER	DATE	
REGION ENGINEER	DATE	DIRECTOR OF O		DATE	
APPROVED FOR THE TRAI	NSPORTATION COMM	ISSION			
NAME		TITLE		DATE	
APPROVED as per Federal	Highway Stewardship	Provisions this	day of		_ , 20
PRO IECT DEVEL OPMENT	ENGINEER				

#### **NOTICE TO ALL BIDDERS**

#### TO REPORT BID RIGGING ACTIVITIES, CALL: 1-800-424-9071

THE U.S. DEPARTMENT OF TRANSPORTATION (DOT) OPERATES THE ABOVE TOLL-FREE "HOTLINE" MONDAY THROUGH FRIDAY, 8:00 A.M. TO 5:00 P.M., EASTERN TIME. ANYONE WITH KNOWLEDGE OF POSSIBLE BID RIGGING, BIDDER COLLUSION, OR OTHER FRAUDULENT ACTIVITIES SHOULD USE THE "HOTLINE" TO REPORT SUCH ACTIVITIES.

THE "HOTLINE" IS PART OF THE DOT'S CONTINUING EFFORT TO IDENTIFY AND INVESTIGATE HIGHWAY CONSTRUCTION CONTRACT FRAUD AND ABUSE AND IS OPERATED UNDER THE DIRECTION OF THE DOT INSPECTOR GENERAL.

ALL INFORMATION WILL BE TREATED CONFIDENTIALLY AND CALLER ANONYMITY WILL BE RESPECTED.

### BIDDER <u>MUST</u> EXECUTE THE FOLLOWING: PARTICIPATION BY MINORITY CONTRACTORS

#### **Utilization of Minority Business Enterprises Clauses**

PROJECT(S):_	«090W-391 & 047-392»	PCN «i0VM & i0XS»
· -		

COUNTY(IES): «Lyman & Gregory»

- 1. The Contractor agrees to use his best efforts to carry out this policy in the award of his subcontracts to the fullest extent consistent with the efficient performance of his contract. As used in this contract, 'Minority Business Enterprise' or 'MBE' means a small business concern, as defined pursuant to section 3 of the Small Business Act and implementing regulations, which is owned and controlled by one or more minorities or women. 'Owned and controlled' means a business: (a) Which is at least 51 per centum owned by one or more minorities or women or, in the case of publicly owned business, at least 51 per centum of the stock of which is owned by one or more minorities or women; and (b) Whose management and daily business operations are controlled by one or more such individuals. 'Minority' means a person who is a citizen or lawful permanent resident of the United States and who is: (a) Black (a person having origins in any of the black racial groups of Africa); (b) Hispanic (a person of Spanish or Portuguese culture with origins in Mexico, South or Central America or the Caribbean Islands, regardless of race); (c) Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or (d) American Indian and Alaskan Native (a person having origins in any of the original peoples of North America); (e) Members of other groups, or other individuals, found to be economically and socially disadvantaged by the Small Business Administration under section 8(a) of the Small Business Act, as amended. Contractors may rely on written representatives by subcontractors regarding their status as minority business enterprise in lieu of an independent investigation.
- 2. The Contractor agrees to establish and conduct a program which will enable minority business enterprise to be considered fairly as subcontractors and suppliers under this contract. In this connection the Contractor shall . . .
  - (a) Designate a liaison officer who will administer the Contractor's minority business enterprises program.
  - (b) Provide adequate and timely consideration of the potentialities of known minority business enterprises in all "make-or-buy" decisions.
  - (c) Ensure that known minority business enterprises will have an equitable opportunity to compete for subcontracts, particularly by arranging solicitations, time for the preparation of bids, quantities, specifications and delivery schedules so as to facilitate the participation of minority business enterprises.
  - (d) Maintain records showing (1) procedures which have been adopted to comply with the policies set forth in this clause, including the establishment of a source list of minority business enterprises, (2) awards to minority business enterprises on the source list, and (3) specific efforts to identify and award contracts to minority business enterprises.
  - (e) Include the "Utilization of Minority Business Enterprises Clause" in subcontracts which offer substantial minority business enterprises subcontracting opportunities.
  - (f) Cooperate with the State's Contracting Officer in any studies and surveys of the Contractor's minority business enterprises procedures and practices that the State's Contracting Officer may from time to time conduct.
  - (g) Submit periodic reports of subcontracting to known minority business enterprises with respect to the records referred to in subparagraph (d) above, in such form and manner and at such time (not more often than quarterly) as the State's Contracting Officer may prescribe.
- The Contractor further agrees to insert in any subcontract hereunder provisions which shall conform substantially to the language of this clause, including this paragraph 3 and to notify the State's Contracting Officer of the names of such subcontractors.
- 4. The bidder hereby certifies that should he at any time decide to subcontract a portion of the work, he will take affirmative action to seek out and consider minority business enterprises as potential subcontractors. He further certifies that he will maintain records showing the contacts made with potential minority business enterprises subcontractors and the results of such contacts.

Name of Company (print or type)	Date
Ву	
Signature of Company Official	Title

### BIDDER MUST EXECUTE THE FOLLOWING:

# STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

### **CONTRACTOR'S AFFIDAVIT / DECLARATION**

JECT(S): «090W-391 & 047-392»		PCN « i0VM & i0XS »
NTY(IES): <u>« Lyman &amp; Gregory »</u>		
	(a partnersh	ip)
pal investigator, project director or other position itted, have not directly or indirectly, entered into ction in restraint of free competitive bidding in cors none of the above have been suspended, detal or state agency, been indicted, convicted, or hess entity described herein by a court of competnich we are currently under suspension or debar	n involved in management any agreement, participa connection with the contra- coarred, voluntarily exclude and a civil judgment rend tent jurisdiction in any ma coment. Nor is a proposed	nt of the project for which this bid is ated in any collusion, or otherwise taken act for the project, and that within the last led or determined ineligible by any ered against any of the above or the atter involving fraud or official misconductions.
	* * * *	
PLETE SIGNATURE BLOCK A. or B. BELOW:		
-	(a partnershi (a corporatio	ip)
County of)  State of	):SS )	
Subscribed and sworn to before me this	day of	, 20
(SEAL)Notary Public	My Commission Exp	ires
Under the penalty of perjury under the laws of true and correct.  Signed	* * * * f the United States, I her (an individua(a partnersh (a corporatio	eby certify that the above statement is
	reby certify that I, We or any owner or partner had investigator, project director or other position itted, have not directly or indirectly, entered into ction in restraint of free competitive bidding in cors none of the above have been suspended, delal or state agency, been indicted, convicted, or hess entity described herein by a court of competition we are currently under suspension or debarst any of the above for any of the above listed rest any of the above for any of the above listed rest any of the above for any of the above listed rest any of the above for any of the above listed rest any of the above for any of the above listed rest any of the above for any of the above listed rest any of the above for any of the above listed rest any of the above for any of the above listed rest any of the above listed, and or of the above listed rest any of the above listed, and or of the above listed rest any of the above listed, and or of the above lis	(an individua (a partnershi (a corporation reby certify that I, We or any owner or partner holding a controlling interpal investigator, project director or other position involved in management (atted, have not directly or indirectly, entered into any agreement, participation in restraint of free competitive bidding in connection with the contraints none of the above have been suspended, debarred, voluntarily excludal or state agency, been indicted, convicted, or had a civil judgment rendess entity described herein by a court of competent jurisdiction in any majority was a currently under suspension or debarment. Nor is a proposed stany of the above for any of the above listed reasons.  ****  ****  ****  ****  ****  ****  ****

PROJECT(S): «090W-391 & 047-392» PCN « i0VM & i0XS »

COUNTY(IES): « Lyman & Gregory »

TYPE OF WORK: <u>BOX CULVERT APRON REPAIR</u>, <u>PIPE REPAIR</u>, <u>EROSION REPAIR AND OUTLET PROTECTION</u>

#### THE FOLLOWING ITEMS ARE INCLUDED IN THIS PROPOSAL FORM:

Special Provision Regarding Section 404 of the Clean Water Act, dated 7/14/08.

Bidding on Highway Construction Projects over \$99,999.99.

Excerpts from Administrative Rules Regarding Differing Site Conditions, Provided for Informational Purposes, dated June 10, 1997.

Special Provision for Fuel Cost Adjustment, dated 7/13/06.

Special Provision for Suspension of Work, dated 2/13/04

Standard Title VI Assurance, dated 1/15/04.

Special Provision For Implementation of Clean Air Act & Federal Water Pollution Control Act, dated 9/1/97.

Special Provision Regarding Minimum Wage on State Funded Projects, dated 10/1/99.

South Dakota Department of Transportation Highway-Heavy Minimum Construction Wage Rates, State Funded Contracts \$100,000.00 or more, as awarded, Let after 9/30/07.

Supplemental Specification for Errata, dated 11/15/06.

Supplemental Specification to Standard Specifications for Roads and Bridges, dated 11/7/07.

Special Provision Regarding Price Schedule for Miscellaneous Items, dated 10/3/07.

\* \* \*

PLAN SHEETS 1-13.

#### STATE OF SOUTH DAKOTA

#### DEPARTMENT OF TRANSPORTATION

#### SPECIAL PROVISION REGARDING SECTION 404 OF THE CLEAN WATER ACT

#### 090W-391 PCN i0VM LYMAN COUNTY

July 14, 2008

The following conditions contained in the Department of the Army Nationwide Permit are to be adhered to in connection with the construction of this project:

#### **33 CFR SECTION 330.3**

<u>Section 330.3 Maintenance</u>: The following conditions must be followed in order for any authorization by a nationwide permit to be valid:

Please refer to the attached *Fact Sheet Nationwide Permit* <u>3</u>.

### THESE CONDITIONS APPLY TO THE FOLLOWING LOCATION(S) ON THIS PROJECT:

090W-391 PCN I0VM Lyman County – Tributary to Medicine Creek at MRM 221.60, STR. NO. 43-113-205 (Section 13-T105N-R78W).

### FACT SHEET NATIONWIDE PERMIT 3

MAINTENANCE. (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable, structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

- (b) This NWP also authorizes the removal of accumulated sediments and debris in the vicinity of and within existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.) and the placement of new or additional riprap to protect the structure. The removal of sediment is limited to the minimum necessary to restore the waterway in the immediate vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend further than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an upland area unless otherwise specifically approved by the district engineer under separate authorization. The placement of riprap must be the minimum necessary to protect the structure or to ensure the safety of the structure. Any bank stabilization measures not directly associated with the structure will require a separate authorization from the district engineer.
- (c) This NWP also authorizes temporary structures, fills, and work necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.
- (d) This NWP does not authorize maintenance dredging for the primary purpose of navigation or beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. Where maintenance dredging is proposed, the pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Sections 10 and 404)

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

General Conditions: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer.

- 1. <u>Navigation</u>. (a) No activity may cause more than a minimal adverse effect on navigation.
- (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
- (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
- 3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. <u>Migratory Bird Breeding Areas</u>. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.

- 6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
- 7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. Management of Water Flows. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- 10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management/requirements.
- 11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
- 13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. <u>Proper Maintenance</u>. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

- 15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
- 16. <u>Tribal Rights</u>. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.
- (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.
- (c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed.
- (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.
- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental

take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at http://www.fws.gov/ and http://www.noaa.gov/fisheries.html respectively.

- 18. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.
- (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.
- (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect

to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

- 19. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.
- (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- **20.** <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction

notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.
- (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.
- (g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.
- (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.
- 21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

#### 22. Coastal Zone Management. Not Applicable.

- 23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.
- 24. <u>Use of Multiple Nationwide Permits</u>. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
- 25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

	de la companya de la	 <del>*************************************</del>		 <del></del>	
(Transferee)		* 1		 $(x_{i}, x_{i}) \in \mathbb{N}_{p_{i}}$	
(Transferee)	The second second		1.5.	+ 4	
		 		 ······	h <del>r</del>
(Date)	1.		\$ - 1 - 1 - 1 - 1		

- **26.** <u>Compliance Certification</u>. Each permittee who received an NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:
- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;
- (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

#### 27. Pre-Construction Notification. See attached pages.

28. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

#### REGIONAL CONDITIONS, SOUTH DAKOTA

The U.S. Army Corps of Engineers has adopted the following regional conditions for activities authorized by nationwide permits within the State of South Dakota. However, the pre-construction notification requirements defined below are not applicable to Nationwide Permit 47.

#### 1. Wetlands Classified as Fens

All nationwide permits, with the exception of 3, 5, 20, 27, 30, 32, 38, 45 and 47, are revoked for use in fens in South Dakota. For nationwide permits 3, 5, 20, 27, 30, 32, 38, and 45 permittees must notify the Corps in accordance with General Condition No. 27 (Notification) prior to initiating any regulated activity impacting fens in South Dakota.

Fens are wetlands that develop where a relatively constant supply of ground water to the plant rooting zone maintains saturated conditions most of the time. The water chemistry of fens reflects the mineralogy of the surrounding and underlying soils and geological materials. The substrate is carbon-accumulating, ranging from muck to peat to carbonates. These wetlands may be acidic to alkaline, have pH ranging from 3.5 to 8.4 and support a range of vegetation types. Fens may occur on slopes, in depressions, or on flats (i.e., in different hydrogeomorphic classes; after: Brinson 1993).

#### 2. Waters Adjacent to Natural Springs

For all nationwide permits permittees must notify the Corps in accordance with General Condition No. 27 (Notification) for regulated activities located within 100 feet of the water source in natural spring areas in South Dakota. For purposes of this condition, a spring source is defined as any location where there is artesian flow emanating from a distinct point at any time during the growing season. Springs do not include seeps and other groundwater discharge areas where there is no distinct point source.

#### 3. Spawning Areas

In order to further minimize adverse impacts in certain waters of the United States and to comply with General Condition No. 3, projects authorized under all available Section 404 Nationwide Permits that would occur in South Dakota's cold water streams must comply with the following regional condition:

In all South Dakota streams classified as cold water streams, when water flow is present, the discharge of dredged or fill material shall not take place between October 15 and April 1. The Corps of Engineers, the South Dakota Department of Game, Fish and Parks, or the South Dakota Department of Environment and Natural Resources can be contacted for the location of State classified cold water streams. The cold water fisheries rivers and streams in South Dakota may be found at http://legis.state.sd.us/rules/DisplayRule.aspx?Rule=74:51:03.

#### 4. Historic Properties

The permittee and/or the permittee's contractor, or any of the employees, subcontractors or other persons working in the performance of a contract(s) to complete the work authorized herein, shall cease work and report the discovery of any previously unknown historic or archeological remains to the South Dakota Regulatory Office. Notification shall be by telephone or fax within 24 hours of the discovery and in writing within 48 hours. Work shall not resume until the permittee is notified by the South Dakota Regulatory Office.

Additional Information: Permittees are reminded of the existing General Condition No. 6 which prohibits the use of unsuitable material. In addition, organic debris, some building waste, and materials excessive in fines are not suitable material.

#### **Further Information**

- 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
  - 3. NWPs do not grant any property rights or exclusive privileges.
  - 4. NWPs do not authorize any injury to the property or rights of others.
- 5. NWPs do not authorize interference with any existing or proposed Federal project.

#### General Condition 27. Pre-Construction Notification.

- (a) <u>Timing</u>. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:
- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) Forty-five calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2),
- (b) <u>Contents of Pre-Construction Notification</u>: The PCN must be in writing and include the following information:
  - (1) Name, address and telephone numbers of the prospective permittee;
  - (2) Location of the proposed project;
- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation.

Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);

- (4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;
- (5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
- (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and
- (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.
- (c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.
- (d) <u>Agency Coordination</u>: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.
- (2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice

that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

- (3) In cases where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
- (4) Applicants are encouraged to provide the Corps multiple copies of preconstruction notifications to expedite agency coordination.
- (5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.
- (e) District Engineer's Decision: In reviewing the PCN for the proposed activity. the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic

environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

A CONTRACT OF THE STATE OF THE

# BIDDING ON HIGHWAY CONSTRUCTION PROJECTS OVER \$99,999.99

Pursuant to South Dakota Administrative Rules 70:07:02, Classification and Bidding Capacity Rating for Highway Contracts, and Section 2.1 of the SDDOT Standard Specifications For Roads and Bridges, all bidders on highway construction projects over \$99,999.99 shall be prequalified. Maintenance stockpile projects are excluded from this requirement. A bidder who is not pre-qualified may submit an experience questionnaire prior to or with the bid letting. Copies of the experience questionnaire may be obtained from any Region DOT office or at the following link:

http://www.sddot.com/pe/projdev/docs/ExperienceQuestionnaire.pdf .

Region personnel will determine from the questionnaire, if the low bidder is capable of performing the work intended. If it is determined that the low bidder does not have the capacity (experience or equipment) to complete this work, they will be determined to be non-responsive, and the bid awarded to the next responsive bidder.

### EXCERPTS FROM ADMINISTRATIVE RULES REGARDING DIFFERING SITE CONDITIONS PROVIDED FOR INFORMATIONAL PURPOSES

June 10, 1997

70:01:05.01:01. Definitions. Words used in this chapter have the following meaning.

(6) "Differing site condition," a subsurface or latent physical condition encountered on the project which differs materially from that indicated in the contract or an unknown physical condition of an unusual nature which differs materially from that ordinarily encountered and generally recognized as inherent in the work provided for in the contract.

70:01:05.01:02. Examination of plans, specifications, special provisions, and site of work. The bidder shall examine the project site, proposal, plans, specifications, supplemental specifications, special provisions, and contract form for the work contemplated. The submission of a proposal is considered conclusive evidence that the bidder has investigated the conditions to be encountered, the character, quality, and quantities of work to be performed, and the materials to be furnished, according to all contract documents.

The Department is not contractually bound by any statement or representation concerning conditions made by any of its employees or agents prior to the execution of the contract, unless they are included in the proposal form, plans, specifications, supplemental specifications, special provisions, or related contract documents.

Boring logs and other records of subsurface investigations are available for inspection by bidders. Such information was obtained for and is intended for state design and estimating purposes. The Department does not guarantee the accuracy of the information. It is made available in order that all bidders may have access to identical subsurface information available to the Department. It is not intended as a substitute for personal investigation, interpretations or judgment of the bidders.

A bidder shall request any explanation he desires regarding the meaning or interpretation of the proposal form, plans, and specifications in sufficient time to allow a reply to reach all bidders before submission of their bid proposal. The Department shall make an interpretation in the form of an addendum to the proposal form and shall furnish it to all prospective bidders by certified letter, or return receipt by FAX, before the time set for opening of proposals. Oral explanations or instructions given before the award of the contract are not binding on the Department.

70:01:05.01:02.01. Differing site conditions. If a differing site condition is encountered at the project by the Department during the progress of the work, the engineer shall immediately notify the contractor in writing of the specific differing condition before it is disturbed and before affected work is performed. If a differing site condition is encountered at the project by the contractor, the contractor shall immediately notify the engineer in writing of the specific differing condition before it is disturbed and before affected work is performed.

After discovering a differing site condition and notifying the contractor or after being notified by the contractor of a differing site condition, the engineer shall investigate the condition. If the engineer determines that the condition materially differs and causes an increase or decrease in the cost or time required for the performance of any work under the contract, the engineer shall make an adjustment, excluding loss of anticipated profits, and modify the contract in writing accordingly. The engineer shall notify the contractor of his determination whether or not an adjustment of the contract is warranted.

A contract adjustment which results in a benefit to the contractor may not be allowed unless the contractor has provided the required written notice.

A contract adjustment may not be allowed under this section for any effects caused on unchanged work.

This section does not apply to material sources shown on the plans and as defined in Section 6 of the Standard Specifications for Roads and Bridges, most recent edition.

#### STATE OF SOUTH DAKOTA

#### DEPARTMENT OF TRANSPORTATION

#### SPECIAL PROVISION FOR FUEL COST ADJUSTMENT

#### **JULY 13, 2006**

Delete Section 9.12 of the Standard Specifications for Roads and Bridges and replace with the following:

#### General

Compensation adjustments for motor fuels and burner fuels consumed in prosecuting the contract shall be determined by the Engineer in accordance with the provisions set forth herein.

Compensation adjustments will be assessed for the cost of the motor fuels and burner fuels whenever the Current Fuel Index (CFI) is outside the range of 85 percent to 115 percent of the Base Fuel Index (BFI). Compensation adjustments for burner fuel will only be made when asphalt concrete bid items are paid for on the estimate.

The Contractor is not required to notify the Department at the time of submitting bids whether he will or will not participate in the fuel cost adjustment program. Prior to execution of the contract, the successful bidder shall submit the Fuel Adjustment Affidavit - Form DOT-208 to the Department.

Determination of whether to participate in the Fuel Adjustment program is the decision of the Prime Contractor. If the Prime Contractor decides not to participate, or if he has a fixed fuel cost for any of the fuel types, no compensation adjustments will be made for the subcontractors by the Department. The Fuel Adjustment Affidavit shall include the anticipated fuel cost of subcontractors, if the Prime Contractor chooses to participate in the fuel cost adjustment program. If compensation adjustments are made, the prime contractor shall ensure that all subcontractors including second and lower tier, are included in the adjustments in proportion to the percentage of work and anticipated fuel cost by that subcontractor.

Each week the Department will record the average wholesale price for No. 2 fuel oil (diesel), regular unleaded gasoline, and propane (LPG), Freight On Board (FOB) South Dakota terminals, as listed in the "Oil Price Information Service" (OPIS) publication.

The BFI price for motor fuels and burner fuel to be used in the contract will be the average of the recorded wholesale fuel prices for the four most recent weekly reporting periods prior to the week of the bid letting.

The CFI price for motor fuels and burner fuel to be used for each progress payment will be the average for the recorded wholesale fuel prices for the four most recent weekly reporting periods available at the time when the progress payment is prepared.

Burner fuel adjustment will use the BFI and CFI as determined for No. 2 fuel oil (diesel), except when the contractor lists the burner fuel as propane (LPG) on Form DOT-208, Fuel Adjustment Affidavit. In that case, the BFI and CFI will be as determined for propane (LPG).

Compensation adjustments will not be assessed for fuel items which the contractor has obtained a fixed fuel cost, or if the contractor elects not to participate in fuel adjustments on Form DOT-208, Fuel Adjustment Affidavit. Fixed fuel costs are defined as a fuel cost that has been set and will remain the same for the entire length of the contract.

Compensation adjustments made in accordance with these provisions may be made on progress payments without a prior approved Construction Change Order.

#### **Fuel Cost Percentage Change**

The biweekly change in fuel cost percentage will be determined by Equation 1 as follows:

#### Equation 1

Change<sub>(x, y, z)</sub> = 
$$\left(\frac{CFI_{(x, y, z)} - BFI_{(x, y, z)}}{BFI_{(x, y, z)}}\right)$$

(x) = Motor Fuel (Diesel)

(y) = Motor Fuel (Unleaded)

(z) = Burner Fuel

Change $_{(x, y, z)}$  = Percent change in the respective fuel price compared to the

Base Fuel Index Price set for the contract.

 $CFI_{(x, y, z)}$  = Current Fuel Index Price for the respective fuel type (\$\$).

 $BFI_{(x, y, z)}$  = Base Fuel Index Price for the respective fuel type (\$\$).

#### **Contract Fuel Percentage**

For the purpose of determining fuel cost adjustment, a percent of contract will be determined for Motor Fuel (Diesel), and Motor Fuel (Unleaded) based on the original

contract prices. Burner Fuel will be adjusted based on the original contract prices of the plant mix asphalt concrete pavement bid items.

The percent of the contract will remain the same throughout the length of the contract. No changes to this percentage will be allowed for any reason. The sum of the individual fuel costs shall not exceed 15% of the Original Contract Cost. The percent of the contract will be determined by Equation 2 as follows:

#### Equation 2

% 
$$Contract(x, y, z) = \left(\frac{Affidavit\ Cost(x, y, z)}{Original\ Contract\ Cost(x, y, z)}\right) x\ 100$$

(x) = Motor Fuel (Diesel) (y) = Motor Fuel (Unleaded)

(z) = Burner Fuel

% Contract $_{(x,y,z)}$  = Percent of contract for each respective fuel item.

Affidavit  $Cost_{(x,y,z)}$  = Cost from Fuel Adjustment Affidavit (Form DOT-

208)

Original Contract  $Cost_{(x,y)}$  = Total of the original contract bid cost excluding lane

rental, and Part B of the bid (when A+B bidding is

used), if applicable (\$\$).

Original Contract  $Cost_{(z)}$  = Total original contract cost for all plant mix asphalt

concrete pavement bid items combined, excluding bid items for asphalt binder, hydrated lime, sawing and sealing joints, compaction samples, etc. Only bid items measured by the Ton will be included in

the calculation.

#### **Compensation Adjustment**

The compensation adjustments will be determined for Motor Fuel (diesel), Motor Fuel (Unleaded), and Burner Fuel separately. The calculation will be based on the current Engineer's pay estimate, the percent of the contract for each of the respective fuel items, and the portion of the Current Fuel Index price that falls outside the 85 to 115 percent range of the Base Fuel Index price.

When the "Change(x, y, z)" from Equation 1 is greater than 15%, Equation 3 will be used to determine the compensation adjustment for each item as follows:

#### Equation 3

$$FCA_{(x, y, z)} = \frac{\% \ Contract_{(x, y, z)}}{100} \ x \ Estimate \ Cost_{(x, y, z)} \ x \left(Change_{(x, y, z)} - 0.15\right)$$

(x) = Motor Fuel (Diesel)

(y) = Motor Fuel (Unleaded)

(z) = Burner Fuel

 $FCA_{(x,y,z)}$  = Fuel Cost Adjustment for the respective fuel item

for the current Engineer's estimate (\$\$).

% Contract $_{(x,y,z)}$  = Percent of contract for each respective fuel item

(from Equation 2).

Estimate  $Cost_{(x,y)}$  = Amount to be paid on the biweekly pay estimate

excluding all pay adjustments made for incentive, disincentive, price adjustments, pay factor

adjustments, liquidated damages, and royalties.

Estimate  $Cost_{(z)}$  = Amount to be paid on the biweekly pay estimate for

all plant mix asphalt concrete pavement bid items combined, excluding bid items for asphalt binder,

hydrated lime, sawing and sealing joints,

compaction samples, all pay adjustments made for incentive, disincentive, price adjustments, pay

factor adjustments, liquidated damages, and royalties. Only asphalt concrete bid items measured

by the Ton will be included in the calculation.

 $Change_{(x,y,z)} \hspace{1cm} = \hspace{1cm} Change \ in \ the \ respective \ fuel \ price \ compared \ to \ the$ 

Base Fuel Index price (from Equation 1).

When the "Change(x,y,z)" from Equation 1 is less than -15%, the Equation 4 will be used to determine the compensation adjustment for each item.

#### Equation 4

$$FCA_{(x, y, z)} = \frac{\% \ Contract_{(x, y, z)}}{100} \ x \ Estimate \ Cost_{(x, y, z)} \ x \left(Change_{(x, y, z)} + 0.15\right)$$

(x) = Motor Fuel (Diesel)

(y) = Motor Fuel (Unleaded)

= Burner Fuel

 $FCA_{(x,y,z)} \\$ Fuel Cost Adjustment for the respective fuel item for the current Engineer's estimate (\$\$). % Contract<sub>(x,y,z)</sub> Percent of contract for each respective fuel item (from Equation 2). Estimate  $Cost_{(x,y)}$ Amount to be paid on the biweekly pay estimate = excluding all pay adjustments made for incentive, disincentive, price adjustments, pay factor adjustments, liquidated damages, and royalties. Amount to be paid on the biweekly pay estimate for Estimate Cost<sub>(z)</sub> =all plant mix asphalt concrete pavement bid items combined, excluding bid items for asphalt binder, hydrated lime, sawing and sealing joints, compaction samples, all pay adjustments made for incentive, disincentive, price adjustments, pay factor adjustments, liquidated damages and royalties. Only asphalt concrete bid items measured by the Ton will be included in the calculation.

#### **Payment**

Change<sub>(x,y,z)</sub>

Adjustments will be determined by the Engineer on biweekly progress payments based on when the completed work is paid for, not when the work is completed. Adjustments will be made by utilizing the following lump sum line items: Motor Fuel Cost Adjustment, Diesel; Motor Fuel Cost Adjustment, Unleaded; Burner Fuel Cost Adjustment, Propane; and Burner Fuel Cost Adjustment, Diesel.

Change in the respective fuel price compared to the

Base Fuel Index price (from Equation 1).

\* \* \* \* \*

For informational purposes, Form DOT-208 follows in Attachment A.

#### FUEL ADJUSTMENT AFFIDAVIT

Project Number
PCN County
The Contractor is not required to notify the Department at the time of submitting bids whether he will or will not participate in the fuel cost adjustment program The Fuel Adjustment Affidavit shall include the anticipated fuel cost of subcontractors.
Does your company elect to participate in a fuel adjustment for this contract for the fuels that do not have a fixed price? No adjustments in fuel prices will be made if "No" is checked.
☐ Yes ☐ No
If yes, provide the total dollars for each of the applicable fuels. No adjustments in fuel price will be made for the fuel types that are left blank or completed with a \$0.00 value.
Diesel (x) \$
Unleaded (y) \$
Burner Fuel (z) \$ Type of Burner Fuel Used:
Sum $(x + y + z) = $
<b>Note:</b> The sum of the x, y, and z may not exceed 15% of the original contract amount.
The following must be completed regardless of whether the Contractor elects to participate in the fuel adjustment affidavit  Under the penalty of law for perjury or falsification, the undersigned,
(Printed Name)
of
hereby certifies that the documentation is submitted in good faith, that the information provided is accurate and complete to the best of their knowledge and belief, and that the monetary amount identified accurately reflects the cost for fuel, and that they are duly authorized to certify the above documentation on behalf of the company.
I hereby agree that the Department or its authorized representative shall have the right to examine and copy all Contractor records, documents, work sheets, bid sheets, and other data pertinent to the justification of the fuel costs shown above.
Dated Signature
Notarization is required only when the Contractor elects to participate in the fuel adjustment affidavit
Subscribed and sworn before me this day of, 20
Notary Public My Commission Expires

#### SPECIAL PROVISON FOR SUSPENSION OF WORK

#### **FEBRUARY 13, 2004**

The following shall apply when suspension of the work is ordered by the Engineer.

If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation and/ or contract time is due as a result of such suspension or delay, the Contractor shall submit to the Engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.

Upon receipt, the Engineer will evaluate the contractor's request in accordance with Section 5.17 and/or Section 8.6 of the Standard Specifications. If the Engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the Engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The Contractor will be notified of the Engineer's determination whether or not an adjustment of the contract is warranted.

No contract adjustment will be allowed unless the Contractor has submitted the request for adjustment within the time prescribed.

No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

\*\*\*\*

# SPECIAL PROVISON FOR STANDARD TITLE VI ASSURANCE

#### **JANUARY 15, 2004**

#### TITLE VI - NONDISCRIMINATION:

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

- (1) <u>Compliance with Regulations</u>: The contractor shall comply with the Regulations relative to nondiscrimination in Federally or State assisted programs of the South Dakota Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended (hereinafter referred to as the "Regulations"), incorporated by reference and made a part of this contract.
- (2) Nondiscrimination: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, religion, national origin, sex, age or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- (3) Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, religion, national original, sex, age or disability.
- (4) Information and Reports: The contractor shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the South Dakota Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the South Dakota Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain this information.
- (5) <u>Sanctions for Noncompliance:</u> In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the South Dakota Department of Transportation shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including but not limited to:
  - (a) withholding of payments to the contractor under the contract until the contractor complies, and/or
  - (b) cancellation, termination or suspension of the contract, in whole or in part.
- (6) Incorporation of Provisions: The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the South Dakota Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for non-compliance. Provided, however, that, in the event of a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the South Dakota Department of Transportation to enter into such litigation to protect the interest of the State, and, in addition, the contractor may request the United States to enter such litigation to protect the interests of the United States.

# SPECIAL PROVISION FOR IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

#### **SEPTEMBER 1, 1997**

By signing this bid, the bidder will be deemed to have stipulated as follows:

- a) That any facility to be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub. L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub. L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR, Part 15), is not listed on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
- b) That the State Transportation Department shall be promptly notified prior to contract award of the receipt by the bidder of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility to be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

# SPECIAL PROVISION REGARDING MINIMUM WAGE ON STATE FUNDED PROJECTS

**OCTOBER 1, 1999** 

This proposal contains the most recent minimum wage rates established by the South Dakota Transportation Commission.

If the amount of this contract, as awarded, is \$100,000.00 or more, the following provisions, as delineated in the current edition of the <u>South Dakota Department of Transportation Labor Compliance Manual for Contractors</u>, shall become applicable:

- 1. The contractor and each subcontractor shall pay his employees not less than the minimum wage established by the South Dakota Transportation Commission, a copy of which is contained in this proposal, for each job classification grouping such employees actually perform at the site of work.
- 2. The contractor and each subcontractor shall furnish each week in which any contract work is performed to the South Dakota Department of Transportation Labor Compliance Officer (LCO), whose address is 700 E. Broadway Ave., Pierre, SD 57501, a certified payroll of wages paid each of its employees. The payrolls submitted shall set out accurately and completely all information required by, and in a form acceptable, to the LCO as described in and according to applicable provisions of the most recent edition of the <u>South Dakota Department of Transportation Labor Compliance Manual for Contractors</u>.
- 3. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and be preserved for a period of three (3) years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, and guards working at the site of the work. The contractor or subcontractor shall make such records available for inspection, copying, or transcription by the LCO and shall permit his or her representatives to interview employees during working hours on the job.

### SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION HIGHWAY-HEAVY MINIMUM CONSTRUCTION WAGE RATES

AGENCY:

**SDDOT** 

20.86

### APPLICABLE TO STATE-FUNDED HIGHWAY PROJECTS AWARDED IN AMOUNT OF \$100,000 OR MORE Effective on Projects Let After September 30, 2007

COUNTY: Statewide See the reverse side of this document for more details (AII) about meeting the minimum wage rate requirements. DATE: 08/23/2007 **LABORERS GROUP GL1** 13.92 Air Tool Op., Common Laborer, Landscape Wrkr, Flagger, Pilot Car Driver, Trucks under 26,000GVW, Blue-top Checker, Materials Checker **GROUP GL2** 15.74 Mechanic Tender (Helper), Pipe Layer (except culvert), Form Builder Tender, Special Surface Finish Applicator, Striping 17.47 Asphalt Plant Tender, Pile Driver Leadsman, Form Setter, Oiler/Greaser **GROUP GL5** 20.36 Form Builder, Carpenter **GROUP GL6** 19.24 Concrete Finisher, Painter, Grade Checker **POWER EQUIPMENT OPERATORS GROUP G01** 14.87 Concrete Paving Cure Machine, Concrete Paving Joint Sealer, Conveyor, Tractor (farm type with attachments), Self Propelled Broom, Concrete Routing Machine, Paver Feeder, Pugmill **GROUP G02** 16.47 Bull Dozer 80 HP or less, Front End Loader 1.25 CY or less, Self Propelled Roller (except Hot Mix), Sheepsfoot/50Ton Pneumatic Roller, Pneumatic Tired Tractor or Crawler (includes Water Wagon and Power Spray units), Wagon Drill, Air Trac, Truck Type Auger, Concrete Paving Saw **GROUP G03** 18.04 Asphalt Distributor, Bull Dozer over 80 HP, Concrete Paving Finishing Machine, Backhoes/ Excavators 20 tons or less, Crusher (may incl. Internal screening plant), Front End Loader over 1.25 CY, Rough Motor Grader, Self Propelled Hot Mix Roller, Push Tractor. Euclid or Dumpster, Material Spreader **GROUP G04** 18.52 Asphalt Paving Machine Screed, Asphalt Paving Machine, Cranes, Derricks, Draglines, Pile

TRUCK DRIVERS

Mechanic, Scrapers GROUP G05

GROUP GT1

Tandem Truck w/o trailer or pup, or single axle truck over 26,000 GVW with Trailer

GROUP GT2

14.47

17.14

Semi-Tractor & Trailer, or Tandem Truck with Pup

ELECTRICIANS

GROUP E01 20.22

Journeyperson- persons performing duties of electrician and not registered in an approved Apprenticeship program

Drivers & Shovels 30 to 50 tons, Backhoes/Excavators 21 to 40 tons, Maintenance

Asphalt Plant, Concrete Batch Plant, Backhoes/Excavators over 40 tons, Cranes, Derricks, Draglines, Pile Drivers & Shovels over 50 tons, Heavy Duty Mechanic, Finish

Motor Grader, Automatic Fine Grader, Milling Machine, Certified Welder

Unlisted classifications needed for work not included within the scope of those listed may be added after award by making application to the Office of Labor Compliance, 700 E Broadway, Pierre, SD 57501-2586, Telephone (605) 773-3795. Contractors are responsible for requesting additional classifications.

# SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION HIGHWAY-HEAVY MINIMUM CONSTRUCTION WAGE RATES Effective on Projects Let After September 30, 2007

In practice, the wage rate is made up of two interchangeable components; the basic hourly wage and "bona fide" fringe benefits. These two components may be paid in cash and in any combination thereof. If fringe benefit contributions are credited towards fulfilling the basic hourly rate requirement in the wage determination, <u>at least</u> the basic hourly rate listed in the contract wage determination must be used in computing overtime pay obligations.

NOTE: If you are applying your "bona fide" fringe benefits towards meeting the SDDOT's minimum wage rates, the hourly cash credit value must be determined for each employee (unless prior approval of another method is obtained from the SDDOT Labor Compliance Officer) and the credit amounts must be provided on your Certified Payroll Report for each employee. The hourly credit value may be different for every employee, depending on the total number of hours worked and whether the contribution paid by the employer is not the same for every employee. In determining the hourly cash equivalent credit for fringe benefit payments, the period of time to be used is the period covered by the contribution. It is imperative that the total hours worked by employees be used as a divisor to determine the rate of contribution per hour since employees may work on both Davis-Bacon covered work and non-government work in the same period. (Please see the SDDOT's Payroll Instructions & Frequently Asked Questions for further details at: <a href="http://www.sddot.com/Docs/Payroll\_StmtofComplianceInstructions.doc">http://www.sddot.com/Docs/Payroll\_StmtofComplianceInstructions.doc</a>)

# Definition of the term "WAGES" reiterated at 29 CFR 5.2(p):

The term "wages" means the basic hourly rate of pay; any contribution irrevocably made by a contractor or subcontractor to a trustee or to a third person pursuant to a "bona fide" fringe benefit fund, plan, or program; and the rate of costs to the contractor or subcontractor which may be reasonably anticipated in providing bona fide fringe benefits to laborers and mechanics pursuant to an enforceable commitment to carry out a financially responsible plan or program, which was communicated in writing to the laborers and mechanics affected.

# "Bona Fide" Fringes reiterated at 29 CFR 5.29:

The "bona fide" fringe benefits enumerated in the Davis-Bacon Act include contractor or subcontractor making payments or incurring costs for medical or hospital care, pensions on retirement or death, compensation for injuries or illness resulting from occupational activity, or insurance to provide any of the foregoing; unemployment benefits; life insurance, disability insurance, sickness insurance, or accident insurance; vacation or holiday pay; defraying costs of apprenticeship or other similar programs; or other bona fide fringe benefits.

"Bona Fide" Fringe benefits <u>do not include</u> benefits required by other Federal, State, or local law; such as Federal Withholding Tax and Social Security Tax. South Dakota State Law requires Workers Compensation Insurance and Unemployment Insurance.

"Bona Fide" Fringe benefits <u>do not include</u> payments made for travel, subsistence (per diem), or to industry promotion funds. The omission in the Act of any express reference to these payments, which are common in the construction industry, suggests that these payments should not normally be regarded as bona fide fringe benefits under the Act.

\* \* \* \*

# STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

# SUPPLEMENTAL SPECIFICATION FOR ERRATA

#### **NOVEMBER 15, 2006**

#### MAKE THE INDICATED CORRECTIONS TO THE FOLLOWING SPECIFIED SECTIONS:

# Section 9.12 – Page 66 – Delete the third paragraph and replace with the following:

The Current Fuel Price Index price shall be the average of the recorded wholesale fuel prices for the four most recent weekly reporting periods.

The Base Fuel Index price for motor fuels and for heating and drying fuels to be used on the project shall be the average of the four most recent weekly reporting periods prior to the week of the letting.

# Section 491.5 A, B, C, D, E – Page 290 – Add the following to the end of the first sentence of each of these sections:

"(square meter)."

# Section 629.4 C – Page 351 – Replace the first sentence with the following:

"Remove Three Cable Guardrail will be measured to the nearest foot (0.1 meter) along the centerline of the cable."

#### Section 629.4 D – Page 351 – Replace the first sentence with the following:

"Removal of Anchor Assembly will be measured by the each."

# Section 630.3 D – Page 354 – Replace the fourth sentence with the following:

"The drawings shall contain all components of the W beam end terminal."

# Section 634.2 – Page 371 – Replace the second paragraph with the following:

"Traffic control devices shall meet the crashworthy requirements of the National Cooperative Highway Research Program Report 350 (NCHRP 350) for Category I, II and III devices."

#### Section 635.3 L – Page 383 – Delete and replace with the following:

**L. Luminaires:** Luminaires shall be adjusted on the support so the laminar sets level as indicated by a small bubble level. Bolts shall be firmly tightened.

# Section 635.4 K – Page 385 – Delete and replace with the following:

**K.** Luminaires: Measurement will be by the actual count of the various types and sizes of luminaires furnished and installed.

# Section 635.5 K – Page 387 – Delete and replace with the following:

**K.** Luminaires: Payment for luminaires of the various types and sizes will be at their respective contract unit prices per each. Payment will be full compensation for furnishing and installing luminaires.

# Section 984.3 H – Page 504 – Replace the first paragraph with the following:

"Temporary road markers shall consist of a yellow or white plastic body providing a horizontal width and length of approximately 3 ½ inches (90 mm) in both dimensions and approximately 3¼ inches (20 mm) high. If flexible vertical markers are used they shall be approximately 4 inches (100 mm) wide and approximately 2 inches (50 mm) high."

<b>Index – Page 532 – Under Portland</b>	Cement Concrete Pavement	– Delete	"Dowel and	Tie Bars	517"
and replace with the following:					

Dowel and Tie Bars		51	19
--------------------	--	----	----

\* \* \* \* \*

# STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

# SUPPLEMENTAL SPECIFICATION TO STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES

## **NOVEMBER 7, 2007**

All items included in this supplemental specification will govern over the Errata.

#### MAKE THE INDICATED CHANGES TO THE FOLLOWING SPECIFIED SECTIONS:

#### Section 2.6 D – Page 11 – Delete and replace with the following:

**D.** PCN

#### Section 5.6 – Page 24 – Delete the last sentence of the eighth paragraph and replace with the following:

South Dakota One Call phone number is 1-800-781-7474 or 811 within the State of South Dakota.

#### Section 5.10 – Page 27 – Add the following sentence to this section:

Neither the Department's authority to inspect all work nor any actual inspections performed by the Department during the course of construction shall constitute an acceptance of work performed, or operate to relieve the Contractor of its obligation to construct the project in compliance with the plans and specifications.

#### Section 5.17 – Page 29 – Delete the first paragraph and replace with the following:

**5.17 CLAIMS FOR ADJUSTMENT AND DISPUTES** - If the Contractor deems that additional compensation is warranted for work or materials not covered in the Contract and not ordered as extra work as defined herein, the Contractor shall give the Area Engineer written notice of the claim for additional compensation.

# Section 5.17 – Page 29 – Delete the fourth paragraph and replace with the following:

Under no circumstances will a claim be considered if written notification is made more than 30 days after the final payment is made.

# Section 5.17 – Page 30 – Delete the sixth and seventh paragraphs and replace with the following two paragraphs:

The Contractor hereby agrees to waive any claim for additional compensation if timely written notification is not furnished and the Area Engineer is not provided the opportunity to keep account of or determine costs, to incorporate alternate methods of accomplishing the disputed work or to otherwise resolve the claim.

A Claims Documentation Form, furnished by the Department, shall be completed by the Contractor and submitted to the Area Engineer after completion of the work on which the claim is based. The Claims Documentation Form shall be completed within 120 calendar days after completion of the work unless an extension is granted, in writing, by the Area Engineer.

# Section 5.17 – Page 30 – Delete the last three paragraphs of this section and replace with the following five paragraphs:

Claims which are properly submitted, but which are not approved will be automatically escalated to the next higher authority level within the Department for review. The Secretary of Transportation has final resolution authority on all submitted claims.

Claims may be submitted by the Department to a third-party claim investigator for further review and investigation. The report prepared by the claim investigator shall not be shared with the Contractor, nor shall the report be used in subsequent administrative or legal proceedings. Failure to fully cooperate with the third-party investigator may result in denial of the claim. After the Secretary of Transportation receives the report, the parties, by mutual agreement, may initiate a non-binding mediation to attempt to resolve the claim.

If the claim is determined completely or partially valid, those portions determined valid, plus interest computed at the rate of 9.25% per annum for the time period between the date of final project acceptance and the date the claim was resolved, will be paid.

If a claim is determined completely or partially valid in a subsequent proceeding in circuit court and pre-judgment interest is awarded by the court on all or a portion of the judgment, that interest shall be computed at the rate of 9.25% per annum.

Nothing in this section shall be construed as establishing any claim contrary to the terms of Section 4.2.

#### Section 7.14 – Page 39 – Delete this section and replace with the following:

7.14 RESPONSIBILITY FOR DAMAGE CLAIMS - The Contractor shall hold harmless and indemnify the Department, its officers and employees, from all suits, actions, or claims of any character brought because of any injuries or damages received or sustained by any person, persons or property arising from the operations of the said Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act", or any other law, ordinance, order, or decree; and so much of the money due the said Contractor under and by virtue of his contract as may be considered necessary by the Department for such purpose may be retained for the use of the State; or in case no money is due, his surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the Department; money due the Contractor will not be withheld when the Contractor produces satisfactory written confirmation from its insurer that adequate public liability insurance and property damage insurance providing coverage for such particular clams as may be made is in force; a copy of a certificate of insurance, without further confirmation of coverage for the particular claim being made, will not be sufficient to satisfy the requirement of written confirmation.

#### Section 7.15 – Page 40 – Delete the first sentence and replace with the following:

**7.15 LIABILITY INSURANCE** - The Contractor shall procure and maintain at the Contractor's expense, during duration of the Contract, liability insurance with an insurance company authorized to do business in the state of South Dakota, for damages imposed by law.

#### Section 8.6 A – Page 48 – Delete the first paragraph on page 48 and replace with the following:

If for reasons beyond the Contractor's control the work cannot be completed within the contract time as specified or as extended according to the provisions of this section, the Contractor may make a written request for an extension of contract time. The written request shall be made at any time prior to the expiration of the contract time as extended. The Contractor's time extension request shall set forth the reasons which will justify an extension of time.

A Time Extension Request Form, furnished by the Department, shall be completed by the Contractor and submitted to the Area Engineer. If the written request was properly filed in accordance with the requirements of this section, the time extension request will be forwarded through the proper channels, to the Secretary of Transportation for final resolution.

The Time Extension Request Form shall be fully completed and will contain the following:

- **1.** A narrative justification citing the basis for the time extension.
- **2.** A statement of the amount of extra compensation, including liquidated damages, incentive, or disincentive associated with the time extension.
- 3. A signed and notarized statement that the information furnished is true and fully documented.
- **4.** Permission for the Department or its authorized representative to examine all Contractor records concerning this time extension request.

The Secretary of Transportation may submit the time extension request to a third-party investigator for further review and investigation. The report prepared by the investigator shall not be shared with the Contractor, nor shall the report be used in subsequent administrative or legal proceedings. Failure to fully cooperate with the third-party investigator may result in denial of the time extension request. After the Secretary of Transportation receives the report, the parties, by mutual agreement, may initiate a non-binding mediation to attempt to resolve the time extension request.

#### Section 8.6 A – Page 48 – Delete the first sentence of the second to last paragraph and replace with the following:

If the Secretary of Transportation finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, the Secretary may extend the time for completion in such amount as the conditions justify.

#### Section 8.6 B – Page 50 – Delete the second paragraph on page 50 and replace with the following:

If for reasons beyond the Contractor's control the work cannot be completed within the contract time as specified or as extended according to the provisions of this section, the Contractor may make a written request for an extension of contract time. The written request shall be made at any time prior to the expiration of the contract time as extended. The Contractor's time extension request shall set forth the reasons which will justify an extension of time.

A Time Extension Request Form, furnished by the Department, shall be completed by the Contractor and submitted to the Area Engineer. If the written request was properly filed in accordance with the requirements of this section, the time extension request will be forwarded through the proper channels, to the Secretary of Transportation for final resolution.

The Time Extension Request Form shall be fully completed and will contain the following:

- 1. A narrative justification citing the basis for the time extension.
- 2. A statement of the amount of extra compensation, including liquidated damages, incentive, or disincentive associated with the time extension.
- 3. A signed and notarized statement that the information furnished is true and fully documented.
- **4.** Permission for the Department or its authorized representative to examine all Contractor records concerning this time extension request.

The Secretary of Transportation may submit the time extension request to a third-party investigator for further review and investigation. The report prepared by the investigator shall not be shared with the Contractor, nor shall the report be used in subsequent administrative or legal proceedings. Failure to fully cooperate with the third-party investigator may result in denial of the time extension request. After the Secretary of Transportation receives the report, the parties, by mutual agreement, may initiate a non-binding mediation to attempt to resolve the time extension request.

#### Section 8.6 B – Page 51 – Delete the last sentence of the second to last paragraph and replace with the following:

If the Secretary of Transportation finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, the Secretary may extend the time for completion in such amount as the conditions justify. The extended time for completion shall then be in full force and effect the same as though it were the original time for completion.

# Section 9.4 – Page 61 – Delete and replace with the following:

**9.4 COMPENSATION FOR ALTERED QUANTITIES** - When the accepted quantities of work vary from the estimated quantities in the Contract, the Contractor shall accept as payment in full, payment at the original contract unit prices for the accepted quantities of work. Allowance will not be made for increased expense, except as provided in Section 4.2. Allowance will also not be made for loss of expected reimbursement or loss of anticipated profits.

#### Section 9.5 D – Page 62 – Delete the first paragraph of this section and replace with the following:

**D. Equipment:** For machinery or special equipment including fuel and lubricants, plus transportation costs, authorized by the Engineer, the Contractor shall be paid in accordance with the provisions and rates set forth in the South Dakota Equipment Rental Rates Book which is currently established as the "Rental Rate Blue Book" published by EquipmentWatch, a division of Penton Business Media Inc. For purposes of determining an hourly rate, the monthly rate divided by 176 shall be used. This rate will be adjusted for regional factors, age and operating expenses as set forth in the "Rental Rate Blue Book".

# Section 9.7 – Page 64 – Add the following sentence to the end of the second to last paragraph:

Progress payments shall not constitute acceptance of the work.

#### Section 9.9 – Page 65 – Delete the last sentence of the last paragraph and replace with the following:

Interest will accrue at a rate of 9.25% per annum for the time period after the noted 120 days until final payment is made.

#### Section 9.12 – Page 66 – Delete and replace with the following:

#### 9.12 THIS SECTION INTENTIONALLY LEFT BLANK

#### Section 120.2 A – Page 73 – Delete and replace with the following:

**A.** Unclassified Excavation: All materials except those classified as rock excavation, unclassified/rock excavation, muck excavation, option borrow excavation, contractor furnished borrow, or borrow unclassified excavation encountered during the construction of the work, regardless of their nature or manner in which they are removed, will be considered unclassified excavation.

#### Section 120.2 – Page 73 – Add the following to the end of this Section:

- **I. Option Borrow Excavation:** Material, furnished by the State, from a pit or other source. The Contractor may use this material at his option.
- J. Contractor Furnished Borrow: Material, furnished by the Contractor, from a pit or other source.
- **K. Borrow Unclassified Excavation:** Material, furnished by the State, from a pit or other source. The Contractor must use this material.

# Section 120.3 – Page 74 – Delete the fifth paragraph and replace with the following:

The subgrade shall be finished to within minus 0.04 feet (13 mm) to plus 0.08 feet (25 mm) from the design grade and typical section shown in the plans and to within  $\pm 0.5$  percent of the typical section cross slope. The quarter crown within any 12 foot (3.6 m) transverse length shall not exceed 0.04 feet (13 mm) when measured with a straight edge, stringline, or by other suitable equipment.

# Section 120.3 B.3.a – Page 77 – Delete the fifth paragraph and replace with the following:

Density shall be determined in accordance with SD 105 (AASHTO T 191), SD 106, or SD 114 (AASHTO T 310).

# Section 120.3 B.3.a – Page 78 – Add the following sentence to the end of the second to last paragraph:

If the material does not contain enough fines to allow for conventional density testing (SD 105 or SD 106), the material shall be compacted as specified for A-2-4(0) and A-3 soils.

# Section 120.4 – Page 79 – Add the following to the end of this Section:

**I. Borrow Unclassified Excavation:** Borrow unclassified excavation will be measured in its original position by cross sectioning. Volumes will be computed in cubic yards (cubic meters) by the average end area method.

Original cross sections will be taken prior to removal of any material and final sections will be taken following replacement of topsoil. Salvaged topsoil which is stockpiled from the borrow sources will be included as borrow unclassified excavation.

The quantity of topsoil stockpiled and respread on borrow sources will be determined by measuring the stockpiles prior to removal of the material from the stockpiles.

#### Section 120.5 – Page 81 – Add the following to the end of this Section:

I. Borrow Unclassified Excavation: Borrow unclassified excavation will be paid for at the contract unit price per cubic yard (cubic meter). Payment will be full compensation for excavation and furnishing the material on the project, construction and compaction of embankments, shaping of slopes, finishing of surface, completion of subgrade, shoulders, and roadway, and maintenance, and for furnishing materials (except topsoil), labor, and incidentals required for restoration of the pit.

Topsoil which is stockpiled from the borrow source will be respread and paid for at the contract unit price per cubic yard (cubic meter) of borrow unclassified excavation and placing topsoil.

# Section 120.5 F – Page 82 – Delete the last sentence and replace with the following:

Topsoil, seed, fertilizer and mulch for the restoration of the pit shall be incidental to the unit price per cubic yard (cubic meter) of contractor furnished borrow.

## Section 210.3 – Page 85 – Delete the second to last paragraph and replace with the following:

The subgrade shall be finished to within minus 0.04 feet (13 mm) to plus 0.08 feet (25 mm) from the design grade and typical section shown in the plans and to within  $\pm 0.5$  percent of the typical section cross slope. The quarter crown within any 12 foot (3.6 m) transverse length shall not exceed 0.04 feet (13 mm) when measured with a straight edge, stringline, or by other suitable equipment.

#### Section 260.3 A – Page 93 - Delete the first paragraph and replace with the following:

**A. Subbase and Base Course:** Roadway shaping shall be performed in accordance with Section 210.3 B prior to placement of the material.

#### Section 260.3 A – Page 94 - Delete the last paragraph and replace with the following:

Recycled Portland cement concrete pavement used as a granular base material shall not be used for Base Course, Salvaged Base Course, or in areas where drainage fabric, edge drains, or other similar drainage systems are present.

# Section 270.1 – Page 97 – Delete and replace with the following:

#### 270.1 DESCRIPTION

This work consists of salvaging, processing, and stockpiling salvaged material from the existing roadway. Salvaged material shall consist of granular material, asphalt concrete mix material, or asphalt mix and granular base material.

# Section 270.2 – Page 97 – Delete the first sentence of this section and replace with the following:

Salvaged material shall be processed to provide a nominal one inch (25 mm) maximum size.

# Section 270.3 A – Page 97 – Delete and replace with the following:

**A. Processing:** The salvage material shall be moved and loaded in a manner that minimizes waste and avoids contamination of the salvage material with underlying subgrade soil. Scrapers shall not be used for the removing or loading operations, but may be used to haul the material. Processing and blending may be accomplished in place, provided the Contractor's method meets the blending and gradation requirements and has positive depth control. Salvaging of material shall not exceed two miles (3.2 kilometers) in advance of the grading operation, unless otherwise directed.

Asphalt concrete mix and granular material shall be processed and stockpiled together so that a uniform blend is obtained. The material shall be moved toward the center of the road, to the extent necessary to ensure that salvage material is not lost down inslopes.

# Section 270.4 – Page 97 – Delete the first paragraph of this section and replace with the following:

Salvage and stockpile asphalt mix material, salvage and stockpile asphalt mix and granular base material, and salvage and stockpile granular material will be measured to the nearest 0.1 ton (0.1 metric ton) or 0.1 cubic yard (0.1 cubic meter) at the time it is hauled to the road.

When less than 5000 tons (4500 metric tons) of salvaged material is required on a project, the material may be measured in a stockpile and converted to tons (metric tons) using a factor of 1.5 tons per Cu. Yd. (1.78 metric tons per cubic meter), in lieu of weighing the material. Alternate measurement techniques may be allowed if agreed upon by the Contractor and Engineer prior to salvaging operations commencing.

# Section 270.5 – Page 97 – Delete the first paragraph of this section and replace with the following:

Salvage and stockpile asphalt mix material, salvage and stockpile asphalt mix and granular base material, and salvage and stockpile granular material will be paid for at the contract unit price per ton (metric ton) or cubic yard (cubic meter). Payment will be full compensation for work required to salvage, process, haul, and stockpile the material.

## Section 320.3 B.1 – Page 103 – Delete the first sentence of the fourth paragraph and replace with the following:

Burner fuel used for production of asphalt concrete shall be propane, butane, natural gas, Grade 1 fuel oil, Grade 2 fuel oil, Grade 4 fuel oil, Grade 4 (light) fuel oil, Grade 5 (light or heavy) fuel oil, or Grade 6 fuel oil.

# Section 320.3 B.1 – Page 103 – Add the following to the end of the seventh paragraph:

An accurate thermometer must be installed in the tank so the temperature can be monitored.

#### Section 320.3 B.4 – Page 104 – Delete the third sentence of the first paragraph.

# Section 320.3 B.4 – Page 105 – Delete the last sentence of the third paragraph and replace with the following:

The system shall be capable of manually controlling the transverse slope and the screed height.

#### Section 320.3 B.5 – Page 105 – Delete the last sentence of the first paragraph and replace with the following:

The rollers shall be capable of being reversed smoothly, without shoving or tearing the asphalt concrete.

#### Section 320.3 C.3.d – Page 106 – Delete and replace with the following:

**d.** A one-gallon (four liter) sample of asphalt binder intended for use shall be obtained from the designated supplier for the project.

#### Section 320.3 D – Page 107 – Delete the last sentence of the fifth paragraph and replace with the following:

A water spray system must be installed at the discharge end of the pug mill. This water system must be used when directed by the Engineer to prevent fugitive lime dust from being released into the air.

#### Section 320.3 E – Page 107 – Add the following after the fourth sentence in the first paragraph:

No material shall be used which could adversely affect the asphalt concrete.

#### Section 320.3 F – Page 107 – Add the following new paragraph after the first paragraph:

Surfaces which have been primed with cutback asphalt shall be allowed to cure for a minimum of 72 hours prior to being overlaid with asphalt concrete.

# Section 320.3 F – Page 107 – Add the following to the end of the third paragraph:

In lieu of a self-propelled paver, asphalt concrete may be placed by a shouldering machine on shoulders less than 6 feet (2 m) in width.

# Section 320.3 F – Page 110 – Delete the first paragraph at the top of Page 110 and replace with the following:

Irregularities shall be corrected before the temperature of the asphalt mix drops below 175° F (80° C). The longitudinal profile can only be improved by using a grinder with diamond blades mounted on a horizontal shaft and when approved by the Engineer. Areas that have been ground shall not be left smooth or polished, but shall have a uniform texture equal in roughness to the surrounding unground asphalt concrete. Grinding shall be day lighted to the outside edge of the pavement. Ground surfaces shall be flushed sealed. Under no circumstances shall operations continue when it becomes evident final rolling is not producing a smooth, uniform, compacted surface free from roller marks and other irregularities.

# Section 320.4 A – Page 111 – Add the following after the first sentence:

Quantities of asphalt binder in excess of the asphalt content listed on the job mix formula plus 0.3% tolerance will not be accepted for payment.

#### Section 320.4 E – Page 112 – Add the following after the first sentence:

Quantities of hydrated lime in excess of the lime content listed on the job mix formula plus 0.1% tolerance will not be accepted for payment.

# Section 320.5 C – Page 112 – Add the following sentence to the end of the paragraph:

Payment will be full compensation for all labor, equipment, materials, and all other items incidental to sampling and repair of the sample locations to the satisfaction of the Engineer.

#### Section 321.3 B – Page 113 – Delete and replace with the following:

**B. Density:** The minimum density requirement shall be 92 percent of the maximum specific gravity of the test specimens prepared in the field in accordance with SD 312. The compacted density of asphalt concrete shall be determined according to SD 311.

#### Section 324.5 – Page 115 and 116 – Delete the last sentence and replace with the following:

When required, the following shall also be included in the contract unit price per ton (metric ton) for Asphalt Concrete Composite: Asphalt for Prime MC-70, Blotting Sand for Prime, Asphalt for Flush Seal SS-1h or CSS-1h, Sand for Flush seal, Hydrated Lime, equipment, labor and incidentals necessary.

## Section 330.2 – Page 121 – Add the following to the end of this section:

**D. Sand for Fog Seal:** Section 879

### Section 330.3 A.2.b - Page 121 - Add the following paragraph after the second paragraph:

Surfaces primed with cutback asphalt shall be allowed to cure for a minimum of 72 hours prior to being overlaid with asphalt concrete.

#### Section 350.2 – Page 127 – Delete this section and replace with the following:

The sealant shall conform to the requirements of ASTM D-6690 Type IV.

The sealant material shall have a unit weight no greater than 9.35 lbs./gal (1124 kilograms per cubic meter).

Only products that meet the above requirements and have performed satisfactorily based on Department analysis may be used. A listing of acceptable products meeting ASTM D-6690 Type IV requirements may be obtained

from the Department's Approved Products List. Products on the Approved Products list for Joint Sealant for Asphalt Over Long Jointed Concrete Pavement may also be used.

The blocking medium shall be an inert, compressible material, which is compatible with the sealant.

# Section 360.3 B.3 – Page 131 – Delete the last sentence of this section:

#### Section 380.2 – Page 139 – Add the following to the end of this section:

**L. Epoxy Resin Adhesive:** Epoxy resin adhesive shall be of the type intended for horizontal applications, and shall conform to the requirements of ASTM C 881, Type IV, Grade 3 (equivalent to AASHTO M235, Type IV, Grade 3).

#### Section 380.3 E – Page 146 – Delete the second sentence and replace with the following:

Truck mixing will be permitted only when approved by the Engineer.

# Section 380.3 E – Page 146 – Delete the fifth paragraph and replace with the following:

When a concrete batch is transported in a truck mixer or agitator and the batch is smaller than 60 percent of the rated capacity of the truck mixer or agitator, the following percentage of additional cementitious material at the same proportions as listed on the mix design shall be added to the batch:

# Section 380.3 E – Page 146 – Delete the paragraph below the table at the top of page 147 and replace with the following:

The above provisions regarding additional cementitious material shall also apply to the mixing of small batches in central plants. Additional cementitious material will not be required when the small batch is mixed in a drum that is sufficiently coated with mortar to withstand the loss of cementitious material. Sufficient mortar coating, as determined by the engineer, may include mortar coating the drum from a previously mixed batch during continuous mixing operations. Additional cementitious material will be required if more than 30 minutes has passed from the mixing of the previous batch, if the drum has been cleaned following the previous batch, or if the mortar coating the drum has been disturbed following the previous batch.

# Section 380.3 E.2 – Page 147 – Delete the second sentence of the second paragraph and replace with the following:

When approved by the Engineer, additional water or cement may be added to the batch after completion of the original mixing, in which case the batch shall be mixed an additional 30 revolutions at mixing speed.

#### Section 380.3 M.2 – Page 151 – Delete the first sentence of the last paragraph and replace with the following:

The Contractor shall load test five percent of the first 500 tie bars that are drilled and epoxied in place.

# Section 380.3 N.6 – Page 153 – Delete this section and replace with the following:

**6. Final Finish**: Before the concrete has attained its initial set, the surface shall be given a final finish with a carpet drag drawn over the surface in a longitudinal direction. The drag shall be mounted on a bridge and shall be sized so that a strip of the carpet at approximately two feet (600 mm) wide is in contact with the pavement surface while the drag is operated.

The condition of the drag shall be maintained so the resultant surface is of uniform appearance with corrugations approximately 1/16 inch (2 mm) in depth. Drags shall be maintained clean and free of encrusted mortar. Drags that cannot be cleaned shall be discarded and replaced.

The carpet shall meet the following requirements:

Facing Material

- Molded polyethylene pile face

Blade Length

- 7/8", ±1/8" (22 mm, ±3 mm)

- 70 oz. per square yard min.

(2.37 kg per square meter min.)

The backing shall be of a strong, durable material, not subject to rot, which is adequately bonded to the facing.

Plain Jointed concrete pavement shall be either longitudinally or transversely tined as specified in the plans.

Continuously reinforced concrete pavement shall be longitudinally tined.

a. Transverse Tining: Immediately following the carpet drag, the surface of the concrete pavement shall be given a transverse metal-tine finish with a separate self-propelled mechanical device. The metal-tine finish shall provide a groove width of 1/8" and a groove depth of 3/16 inch (5 mm) ± 1/16 inch (2 mm). The spacing between the individual tines shall meet the following: Inches (ten foot tining rake)

```
2-5/16,
                    1-1/4,
                            2-7/16,
                                     2-1/16, 1-1/4, 13/16,
                                                                     1-5/16,
         2-15/16,
                                                                1,
                                                                              1-1/8,
                                                                                       2-5/16
                 2-3/4.
                                           2-1/8,
2-1/2,
        2-7/8.
                         1-1/8,
                                  2-3/4,
                                                    1-15/16, 13/16, 7/8,
                                                                              2-5/8.
                                                                                       3 - 1/16
                         9/16,
                 9/16,
                                  1-5/8,
                                           2-3/8,
                                                         1-1/4,
                                                                             2-15/16,
3-1/16,
          7/8,
                                                    1,
                                                                  1-9/16,
                                                                                        1-1/8
                                                   13/16,
1-15/16,
          2-3/16,
                    2,
                         2-13/16,
                                    1,
                                         2-11/16,
                                                             1-7/8,
                                                                      9/16,
                                                                              2-5/16,
                                                                                        1-7/8
                                    15/16, 7/8, 1-5/8,
                                                                9/16, 1-3/4,
                                                                                  2-7/8,
2-1/2,
         1-5/16,
                   3-3/16, 1-3/8,
                                                                                           3
                                         2-13/16,
                                                   1-5/8,
1-5/8,
        1-5/8,
                    7/8,
                          9/16,
                                 5/8,
                                                            2-7/16,
                                                                     13/16,
                                                                              1-1/4,
                                                                                       11/16
2-3/4, 2-5/16, 1-1/8
```

Millimeters (3 meter tining rake)

58,	74,	31,	62,	53,	32,	21,	26,	33,	28,	59
64,	73,	70,	29,	70,	54,	49,	20,	22,	67,	78
77,	23,	15,	15,	41,	60,	25,	32,	39,	75,	28
50,	55,	51,	72,	25,	69,	21,	47,	15,	59,	47
64,	34,	55,	35,	24,	22,	42,	14,	45,	73,	76
41,	41,	22,	15,	16,	71,	41,	62,	21,	31,	17
70,	58,	29								

Successive passes of the tining shall not overlap.

Each location, where transverse joint saw cuts are to be made, shall be protected from tining by covering with a metal strip from four inches (100 mm) to six inches (150 mm) or by other methods that produce acceptable results.

Brooming may be used on irregular areas in lieu of the carpet drag and tine finish. The broom shall be drawn transversely across the pavement with adjacent strokes slightly overlapping.

Brooming shall be uniform in appearance and shall produce grooves 1/16 inch (2 mm) deep. Texturing shall be completed while the concrete surface can be broomed without being torn or unduly roughened by the operation.

The finished surface shall be free from rough and porous areas, irregularities, and depressions resulting from improper handling of the broom.

**b. Longitudinal Tining:** Immediately following the carpet drag, the surface of the concrete pavement shall be given a longitudinal metal-tine finish with a wire broom or comb attached to a separate self-propelled mechanical device.

Transverse joints shall not be protected from longitudinal tining, the tining shall be continuous across the joints.

The slab shall not be tined within 3 inches of the edge of the slab, centerline, or rumblestrip.

The longitudinal tining equipment shall have the ability to be raised and lowered, and shall have vertical and horizontal string line controls to ensure straight grooves that are parallel to the longitudinal joint.

The curing unit shall be separate from the tining unit when longitudinal tining is used unless the tining and curing can be accomplished simultaneously with the same piece of equipment at the specified rate to the satisfaction of the Engineer.

The tine bar shall have a single row of tines and shall provide a groove width of 1/8 inch  $(3 \text{ mm}) \pm 1/64$  inch (0.4 mm) and a groove depth of 3/16 inch  $(5 \text{ mm}) \pm 1/16$  inch (2 mm). The spacing between the individual tines shall be uniformly spaced at 3/4 inch (20 mm) intervals.

# Section 380.3 O – Page 155 – Add the following two sentences to the beginning of this section:

The pavement surface shall be checked for deviations using either a ten foot (3 meter) straightedge or a profilograph (when specified). When the use of a profilograph is specified, the ten foot (3 meter) straightedge check may also be required in locations determined by the Engineer.

# Section 380.3 O.2.c.2 – Page 157 – Delete the first paragraph and replace with the following:

Areas excluded from profilograph testing shall be shoulders, transitions, area within 50 feet (15 m) of existing pavement and bridges, existing curb and gutter sections, ramps, pavements on horizontal curves having a centerline radius less than 1,000 feet (300 m) and the superelevation transitions. Pavement sections not subject to profilograph testing shall meet the 10 foot (3 m) straight edge test requirements in Section 380.3 O.1.

#### Section 380.3 O.2.h – Page 158 – Delete the last paragraph of this section.

# Section 390.2 B – Page 167 – Delete and replace with the following:

- **B.** Concrete Patches: Concrete patching material shall be one of the following:
  - 1. A packaged, dry, rapid-hardening cementitious mortar conforming to the requirements of ASTM C 928, Type R-3 containing no chloride ions.
  - **2.** A packaged, dry, rapid-hardening concrete materials conforming to the requirements of ASTM C 928, Type R-3 containing no chloride ions.
  - **3.** A patching material meeting the following requirements:
    - **a.** Cement: Cement shall be Type III conforming to Section 750.
    - **b.** Air Entraining Admixtures: Air entraining admixtures shall conform to Section 751.
    - **c.** Water: Water shall conform to Section 790.
    - **d.** Fine Aggregate: Fine aggregate shall conform to Section 800.
    - **e.** Coarse Aggregate: Coarse aggregate shall be crushed quarry stone, size five, conforming to Section 820.
    - **f.** Curing Compound: Curing compound shall conform to Section 821.
    - **g. Proportioning:** Materials for concrete patches shall be mixed at the following proportions:

Fine Aggregate	165 lbs./bag (75 kg/bag) cement
Coarse Aggregate	165 lbs./bag (75 kg/bag) cement
Cement (min)	8.0 bags/c. y.(10.5 bags/cubic meter) concrete
Water (maximum)	

**h.** Air and Slump: The slump and air shall conform to the following:

Air	7% <u>+</u> 2%
Slump	1-1/2" (40 mm) maximum

#### Section 380.3 R.2 – Page 161 – Delete the first sentence of the third paragraph and replace with the following:

The sealant surface shall be tooled to produce a slightly concave surface below the pavement surface.

#### Section 391.2 A – Page 171 – Add the following paragraph to the end of this Section:

Alternate design mixes for the grout may be submitted to the Engineer for approval.

#### Section 392.2 A – Page 177 – Add the following paragraph to the end of this section:

Alternate jacking slurry design mixes may be submitted to the Engineer for approval.

#### Section 410.3 G.6 – Page 195 – Add the following section to the end of this section:

**g.** The turn-of-nut method for bolt tightening may be used when specified in the plans. When the turn-of-nut installation method is specified, hardened washers are not required except as specified in Section 410.3 G.6.d.

A sufficient number of bolts shall first be placed in the joint and snugged to insure that all faying surfaces are in firm contact, prior to tightening. Snug tight is defined as the tightness attained by a few impacts of an impact wrench or the full effort of a man using an ordinary wrench. Bolts shall be placed in any remaining holes and snugged tight as erection bolts or pins are removed. All bolts in the joint shall then be tightened the amount shown in Table 2 progressing systematically from the center most rigid part of the joint to its free edges. When tightening, the element not turned shall be held with a hand wrench to prevent rotation.

Table 2 Nut Rotation from Snugged Condition <sup>a,b</sup>								
	Geometry of Outer Faces of Bolted Parts							
		One Face Normal to	Both Faces Sloped Not					
		Bolt Axis and Other	More Than 1:20 From					
Bolt Length Measured		Face Sloped Not More	Normal to Bolt Axis,					
From Underside of Head	Both Faces Normal to	Than 1:20, Bevel	Bevel Washers Not					
to End of Bolt	Bolt Axis	Washer Not Used	Used					
Up to and including 4								
diameters	1/3 turn	1/2 turn	2/3 turn					
Over 4 diameters but not								
exceeding 8 diameters	1/2 turn	2/3 turn	5/6 turn					
Over 8 diameters but not								
exceeding 12 diameters <sup>c</sup>	2/3 turn	5/6 turn	1 turn					

Nut rotation is relative to bolt, regardless of the element (nut or bolt) being turned. For bolts installed by 1/2 turn and less, the tolerance should be plus or minus 30 degrees; for bolts installed by 2/3 turn and more, the tolerance should be plus or minus 45 degrees

#### Section 421.3 A – Page 213 – Delete the second sentence of the second paragraph and replace with the following:

Backfill shall be compacted to 95% or greater of Maximum Dry Density in horizontal layers not to exceed six inches (150 mm) loose depth.

# Section 423.1 – Page 219 – Delete this section and replace with the following:

#### 423.1 DESCRIPTION

This work consists of the design, construction, and subsequent removal of all temporary works including, but not limited to; falsework, formwork, cofferdams, work berms and platforms, temporary traffic and stream diversions, and temporary retaining structures.

b Applicable only to connections in which all material within grip of the bolt is steel.

No research work has been performed by the Research Council Riveted and Bolted Structural Joints to establish the turn-of-nut procedure when bolt lengths exceed 12 diameters. Therefore, the required rotation must be determined by actual tests in a suitable tension device simulating the actual conditions.

#### Section 423.3 A – Page 219 – Add the following to the end of this section:

All temporary works in streams or wetlands are required to be covered in the Corp of Engineers 404 Permit. At the time of the preconstruction meeting, the Contractor shall submit documentation for all temporary works for the purpose of complying with the 404 Permit requirements. The documentation shall include at a minimum:

- 1. A written description of the proposed temporary works including types of materials to be used, how the temporary works will be installed, removed, and what portion, if any, will remain in place after construction.
- 2. Details showing approximate size and location of the temporary works. Details shall include at a minimum, a Plan View and a Cross-Section View of the temporary works. Details shall provide sufficient dimensions such that the approximate size of the temporary works and location of the temporary works from a known point is shown.
- **3.** Estimated quantities of all temporary fill material below the ordinary high water elevation. If the temporary fill is to be placed in a wetland, the estimated quantity shall be the amount of wetland loss, (in acres).

If during the course of construction there is a need for additional temporary works, the documentation shall be submitted to the Engineer at that time.

The Engineer will submit the documentation to the Corp of Engineers for approval. No construction of temporary works below the ordinary high water mark or in wetlands may begin until Corp of Engineer approval is attained by the Engineer.

# Section 423.5 – Page 221 – Delete this section and replace with the following:

# 423.5 BASIS OF PAYMENT

No payment will be made for temporary works. All costs involved in designing, constructing, and removing temporary works shall be incidental to the other contract items.

#### Section 430.2 B – Page 223 – Delete this section and replace with the following:

B. Granular Bridge End Backfill: The granular bridge end backfill material shall conform to Section 882.

# Section 430.3 C – Page 225 – Delete the second and third paragraphs and replace with the following:

Granular bridge end backfill shall not be placed until at least 24 hours after completion of the deck pour. In addition, granular bridge end backfill shall not be placed until the abutments and sills, including wingwalls, have attained full design strength.

Granular bridge end backfill shall be placed in loose lifts not to exceed eight inches (200 mm) and compacted to 97% of maximum dry density. The moisture at the time of compaction shall be within  $\pm$  4% of optimum moisture. Maximum dry density and optimum moisture will be determined in accordance with SD 104.

# Section 430.3 C.1 through 6 – Page 225 and 226 – Delete and replace with the following:

- 1. Each layer of granular bridge end backfill shall be placed in loose lifts not to exceed eight inches (200 mm). The placement and compaction of each layer must be inspected and approved by the Engineer prior to placement of the next layer.
- 2. Any equipment used to install the bridge end backfill over the geotextile fabric shall be operated in such a manner that the geotextile fabric is not damaged. To avoid damage to the geotextile fabric, the equipment used to place, spread, and compact the granular bridge end backfill over the geotextile fabric shall not be operated on less than six inches (150 mm) of material.
- 3. The geotextile fabric may be oriented in any direction. To minimize the horizontal deflection of the mechanically stabilized vertical face, it is extremely important to make sure that the geotextile fabric is taut and free of wrinkles during placement of the granular bridge end backfill.

- 4. Any geotextile fabric that is torn or punctured shall be repaired or replaced by the Contractor at no additional cost to the Department. The repair shall consist of a patch of the same type of geotextile fabric being placed over the ruptured area such that it overlaps the damaged area a minimum of 3 ft. (1 m) from any damaged edge. A sewn patch meeting the same requirements for seam strength as that of the fabric being repaired is allowed.
- 5. Seams that are perpendicular to face of the mechanically stabilized backfill may be constructed by overlapping the fabric a minimum of two feet (0.6 m). All other seams, as well as those in which the two foot (0.6 m) minimum overlap cannot be accomplished, shall be sewn. All seams shall be inspected by the Engineer and any deficient seams repaired by the Contractor prior to placement of the next layer of granular bridge end backfill. Geotextile fabric that is joined by sewn seams shall have strength properties at the seam equal to the specified strength requirements of the geotextile fabric. High strength polyester, polypropylene, or kevlar thread shall be used for sewn seams. Nylon threads shall not be used. The edges of the fabric shall be even and shall be completely penetrated by the stitch.
- **6.** During periods of shipment and storage, the geotextile fabric shall be enclosed in a heavy duty opaque wrapping such that the fabric is protected from direct sunlight, ultraviolet rays, dirt or debris. The fabric shall not be subjected to temperatures greater than 140°F (60°C).

# Section 430.5 B – Page 227 – Delete the second sentence and replace with the following:

Payment will be full compensation for all labor, equipment, materials, water, and all other items incidental to scarifying, reshaping and recompacting the area to be backfilled, furnishing and installing the polyethylene sheeting, drainage fabric, geotextile fabric, and furnishing, placing, and compacting the porous backfill and granular bridge end backfill to the limits shown on the plans.

# Section 450.3 G – Page 232 – Delete and replace with the following:

**G.** Backfill Above Bedding Grade: Moisture and density requirements for backfill shall be as specified in the plans and shall meet the requirements of Section 120. The backfill material shall be pre-moistened if necessary to obtain uniform moisture.

Selected embankment material shall be placed along the pipe in layers not exceeding six inches (150 mm) in depth and thoroughly compacted by mechanical compactors to the specified density before successive layers are placed. The width of the berms on each side of the pipe shall be twice as wide as the external diameter of the pipe or 12 feet (four meters), whichever is less. This method of backfilling shall be continued until the embankment is at least two feet (600 mm) over the top of the pipe.

In trench installations, backfill width shall be equal to trench width. The backfill shall be brought up evenly on both sides of the pipe for its full length. This method of backfilling shall be continued until the embankment is at least two feet (600 mm) over the top of the pipe.

#### Section 460.3 A – Page 236 – Delete the second sentence in Note 1 under Table 1.

Section 460.3 A – Page 236 – Delete the second sentence of the first paragraph on page 236 and replace with the following:

The mix design shall be based upon obtaining an average concrete compressive strength 1200 psi above the specified minimum 28 day compressive strength.

Section 460.3 A – Page 236 – Delete the last sentence of the second paragraph on page 236 and replace with the following:

Trial batches shall be conducted in accordance with the American Concrete Institute Publication ACI 211.1, ACI 318, ASTM C192 and the following:

#### Section 460.3 B.5 – Page 239 – Delete the first sentence and replace with the following:

If the Contractor utilizes the option to core as specified in Section 460.3 B.4, the Contractor shall arrange for an independent testing laboratory to perform the coring and compressive testing within 14 calendar days of notification of the failing compressive strength of the backup cylinder.

#### Section 460.3 B.5 – Page 239 – Delete the last sentence of the second paragraph.

# Section 460.3 B.5.a - Page 239 - Delete this section and replace with the following.

a. Include DOT project number, county, & PCN.

## Section 460.3 E – Page 243 – Delete the third paragraph and replace with the following:

When a concrete batch is transported in a truck mixer or agitator and the batch is smaller than 60 percent of the rated capacity of the truck mixer or agitator, the following percentage of additional cementitious material at the same proportions as listed on the mix design shall be added to the batch:

#### Section 460.3 K.1 – Page 247 – Delete and replace with the following:

1. The coarse aggregate piles must be flushed with water for a minimum of 24 hours.

# Section 460.3 K – Page 248 – Delete the twelfth paragraph and replace with the following:

Barrier curbs will not be allowed to be placed with slipform paving equipment.

#### Section 465.2 A.3 – Page 265 – Add the following sentence to the end of the paragraph:

Slump loss shall be tested in accordance with SD 423.

#### Section 465.2 A.6 – Page 265 – Delete the last sentence of the second paragraph and replace with the following:

Water reducers conforming to AASHTO M194 Type C (Accelerating) and Type E (Water-Reducing and Accelerating) will not be permitted.

### Section 480.3 C.1 – Page 280 – Delete the fifth paragraph and replace with the following:

Welding of reinforcing steel shall not be allowed without written approval of the Bridge Construction Engineer. The request for approval shall list the bars to be welded, welding procedure, type of electrode, joint detail, and mill certificate of the reinforcing steel to be welded.

# Section 480.4 – Page 281 and 282 – Delete the English and Metric Bar Designation tables and replace with the following:

#### **Bar Designation**

Size (English)	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	No. 11	No. 14	No. 18
Weight (lb/ft)	0.376	0.668	1.043	1.502	2.044	2.670	3.400	4.303	5.313	7.65	13.60
Size (Metric)	10	13	16	19	22	25	29	32	36	43	57
Weight (kg/m)	0.560	0.994	1.552	2.235	3.042	3.973	5.060	6.404	7.907	11.38	20.24

#### Section 550.3 A.2 – Page 303 – Delete the second sentence of the last paragraph and replace with the following:

When backfilling extra depth holes in accordance with Section 550.3 C.1.f.2, a grout admixture shall be added to the grout mixture in accordance with the manufacturer's recommendations.

# Section 550.3 C.1.b – Page 305 – Delete the third sentence of the first paragraph and replace with the following:

After completion of the Type 1A removal, the Engineer will inspect the deck and mark remaining areas of unsound existing overlay.

# Section 550.3 C.1.c – Page 306 – Delete and replace with the following:

c. Type 1B Removal areas will be determined after Type 1A Removal (or Type 2A Removal if specified) has been accomplished. Type 1B Removal shall consist of removing delaminated or unsound concrete by chipping below the Type 1A Removal (or Type 2A Removal if specified) and extending down to the top of the top bar in the top

mat of reinforcing steel. Concrete removed below the top of the top bar incidental to Type 1B Removal will be considered a part of the Type 1B Removal.

# Section 550.3 C.1.f.2 – Page 306 – Delete the first sentence and replace with the following:

**Backfill of Extra Depth Holes:** When Type 1D removal is necessary, or when holes deeper than 4" (100mm) below the top of the scarified surface are encountered, they shall be backfilled as follows:

#### Section 560.2 A – Page 317 – Add the following:

**6. Cement:** Section 750. Type II cement shall be used, unless otherwise specified.

#### Section 560.3 A – Page 317 – Add the following paragraph after the first paragraph:

Precast concrete drop inlets shall conform to the requirements of Section 670.

# Section 560.3 A.1 – Page 317 – Delete and replace with the following:

1. **Fabrication:** The Fabricator shall notify the Area Engineer prior to the fabrication of precast and prestressed concrete items.

# Section 560.3 B.1 – Page 319 – Delete the second sentence of the fifth paragraph and replace with the following:

A checked design includes the design calculations and check design calculations performed by an independent Engineer registered in the State of South Dakota.

#### Section 560.3 B.2.b – Page 321 – Delete the second paragraph and replace with the following:

Acceptance of the precast units shall be in accordance with Section 460.3 B except that the fabricator shall be responsible for the sampling, preparing, and properly curing of all concrete cylinders for concrete compressive strength in accordance with the Materials Manual. The precast units will be accepted when the minimum design concrete compressive strength requirements have been meet. Accepted precast units represented by that test group of cylinders may be delivered to the project and will not require the 28 day cylinder test.

# Section 600.2 A.17 – Page 333 – Add the following sentence at the end of the paragraph:

The concrete pad must be securely mounted and solidly supported under the laboratory to minimize vibration while operating the Marshall compactor.

# Section 605.3 C – Page 339 – Delete the third sentence of the first paragraph and replace with the following:

If fly ash is used, the minimum amount of cement to be replaced is 15 percent and the maximum amount is 20 percent at a 1:1 ratio by weight.

# Section 630.4 A – Page 355 – Delete this section and replace with the following:

**A. Beam Guardrail:** Each class and type will be measured to the nearest 0.1 foot (0.1 meter) along the centerline of the rail. The length in feet (meters) shall be the overall length center to center of end posts or to connections with bridges.

#### Section 630.4 C – Page 355 – Delete this section and replace with the following:

**C. Remove Beam Guardrail:** Remove Beam Guardrail will be measured to the nearest 0.1 foot (0.1 meter) along the centerline of the rail.

# Section 630.5 A - Page 355 - Delete this section and replace with the following:

**A. Beam Guardrail:** Beam guardrail will be paid for at the contract unit price per 0.1 foot (0.1 meter) for each class and type installed. Payment will be full compensation for labor, materials, equipment, and incidentals required.

#### Section 630.5 C – Page 356 – Delete this section and replace with the following:

**C. Remove Beam Guardrail:** Remove Beam Guardrail will be paid for at the contract unit price per 0.1 foot (0.1 meter). Payment will be full compensation for the backfill of holes and the removal of the guardrail including end terminals, beam guardrail, posts, blocks, and hardware from the project limits.

#### Section 632.3 H.2.c – Page 361 – Delete and replace with the following:

c. Anchor bolts shall be provided with leveling nuts, top nuts, and jam nuts. Anchor bolts shall be tightened in accordance with Section 635.3 F.

# Section 633.3 D – Page 368 – In the grooving tolerance tables, replace "Depth of Groove" with the following:

(English)

Depth of Groove 80 mils + 10 mils

(Metric)

Depth of Groove 2.032 mm + 0.25 mm

# Section 634.3 C – Page 374 – Add the following paragraph after the first paragraph:

For 2 lane roadways with average daily traffic volumes of 2500 or less, no passing zones may be identified using DO NOT PASS, PASS WITH CARE, and NO PASSING ZONE signs rather than pavement markings. The DO NOT PASS and NO PASSING ZONE signs shall be used to mark the beginning of each no passing zone, and the PASS WITH CARE signs to mark the end of each zone. These may be utilized in place of the pavement markings normally used to identify no passing zones for no longer than 2 weeks. The placement of the dashed centerline marking and these signs shall be required prior to nightfall.

# Section 635.3 C.3 – Page 380 – Add the following sentence at the end of the first paragraph:

The contractor shall not use a machine requiring flowing water for installation of conduit under streets or roadways unless approved by the Engineer.

# Section 635.3 F – Page 381 – Delete and replace with the following:

- F. Anchor Bolts: Anchor bolts shall be installed in accordance with the following requirements.
  - 1. General: Anchor bolts shall be provided with leveling nuts and top nuts. Anchor bolts for light towers shall be provided with leveling nuts, top nuts, and jam nuts.
  - 2. Anchor Bolt Installation: A steel template shall be used to accurately locate and hold the anchor bolts plumb and in proper alignment. This template shall be in place during placement of the concrete base and shall remain in place a minimum of 24 hours after the concrete placement has been completed. Out of position anchor bolts and anchor bolts greater than 1:40 out-of-plumb are cause for rejection of the base. Bending of the anchor bolts to straighten or move into position, or alterations of the pole base plate will not be permitted.

# 3. Anchor Bolt Tightening:

- **a.** All leveling nuts (bottom nuts) shall be brought to full bearing on the bottom of the base plate. The bottom of the leveling nuts must be kept as close to the concrete base as practical, and shall not be more than one inch above the top of the concrete base. Leveling nuts must be threaded onto the anchor bolt to provide at least ¼ inch (6 mm) projection of the bolt above the top nut or jam nut if required when in its tightened position.
- **b.** A softened beeswax or equivalent shall be applied to the top nut bearing face and top nut internal threads prior to placement on the anchor bolt. All top nuts shall be tightened to a snug tight condition. Snug tight is defined as the tightness attained by the full effort of a person using a wrench with a length equal to 14 times the diameter of the anchor bolt, except the minimum length shall be 18 inches. The use of adjustable wrenches will not be allowed. The full effort required to achieve a snug tight condition, shall be applied as close to the end of the wrench as possible. Pull firmly by

leaning back and using full body weight (brace feet to prevent slipping) on the end of the wrench until the nut stops rotating. This snug tightening shall be accomplished in a minimum of two separate passes of tightening. The sequence of tightening in each pass shall be such that the opposite side nut, to the extent possible, shall be subsequently tightened until all the nuts in that pass have been snugged.

Snug tightness of both the top and leveling nuts shall be checked in the presence of Department personnel after the Contractor has completed nut snugging as described above, but prior to final tightening. Snug tightness of the nuts (top and leveling) shall be checked by applying a torque in a range from 20% to 30% of the verification torque. See Table 1 for verification and snug tight torque values.

Table 1

Anchor Bolt Tightening

Anchor	Anchor Bolt		Minimum		30% Snug	20% Snug
Bolt	Stress Area	Yield	Tensile	Verification	Tight Torque	Tight Torque
Diameter	(sq in)	Strength	Strength	Torque	(ft-lbs)	(ft-lbs)
(in)		(ksi)	(ksi)	(ft-lbs)		
1.00	0.61	36.0	58.0	177	53	35
1.25	0.97	36.0	58.0	351	105	70
1.50	1.41	36.0	58.0	613	184	123
1.75	1.90	36.0	58.0	964	289	193
2.00	2.50	36.0	58.0	1449	435	290
2.25	3.25	36.0	58.0	2120	636	424
2.50	4.00	36.0	58.0	2899	870	580
2.75	4.93	36.0	58.0	3930	1179	786
3.00	5.97	36.0	58.0	5192	1558	1038
1.00	0.61	55.0	75.0	274	82	55
1.25	0.97	55.0	75.0	545	163	109
1.50	1.41	55.0	75.0	951	285	190
1.75	1.90	55.0	75.0	1496	449	299
2.00	2.50	55.0	75.0	2249	675	450
2.25	3.25	55.0	75.0	3289	987	658
2.50	4.00	55.0	75.0	4498	1349	900
2.75	4.93	55.0	75.0	6098	1830	1220
3.00	5.97	55.0	75.0	8056	2417	1611
2.00	0.57	55.5	, , , ,	0000	2.17	1011
1.00	0.61	75.0	100.0	366	110	73
1.25	0.97	75.0	100.0	726	218	145
1.50	1.41	75.0	100.0	1268	381	254
1.75	1.90	75.0	100.0	1994	598	399
2.00	2.50	75.0	100.0	2999	900	600
2.25	3.25	75.0	100.0	4386	1316	877
2.50	4.00	75.0	100.0	5998	1799	1200
2.75	4.93	75.0	100.0	8131	2439	1626
3.00	5.97	75.0	100.0	10742	3223	2148
1.00	0.61	105.0	125.0	457	137	91
1.25	0.97	105.0	125.0	908	272	182
1.50	1.41	105.0	125.0	1586	476	317
1.75	1.90	105.0	125.0	2493	748	499
2.00	2.50	105.0	125.0	3749	1125	750
2.25	3.25	105.0	125.0	5482	1645	1096
2.50	4.00	105.0	125.0	7497	2249	1499
2.75	4.93	105.0	125.0	10164	3049	2033
3.00	5.97	105.0	125.0	13427	4028	2685

- c. At this point, the top nut and leveling nut must be in full bearing on the base plate. If any gap exists between either nut (top or leveling) and the base plate, a beveled washer shall be added between the nut washer and the base plate to eliminate the gap. The beveled washer shall be stainless steel Type 304, the same diameter as the hardened washer, and beveled as required to eliminate the gap between the nut and the base plate. All nuts shall be retightened according to steps (a) and (b) above if beveled washers are added. All costs required to remove and re-erect the structure to install beveled stainless steel washers shall be at the Contractor's expense.
- **d.** Using a hydraulic wrench rotate all top nuts as indicated in Table 2. The additional turn of the nuts shall be accomplished by tightening all the nuts in two separate passes of equal incremental turns (i.e., for 1/3 turn use 1/6 turn each pass). The sequence of nut tightening in each pass shall be such that the opposite side nut, to the extent possible, shall be subsequently tightened until all the nuts in that pass have been turned. There shall be no rotation of the leveling nut during top nut tightening.

In lieu of a hydraulic wrench, torque wrenches and multipliers may be used to achieve the desired nut rotations and tightness.

**e.** Tightness of the nuts shall be checked in the presence of Department personnel. Tightness of the nuts shall be checked within a minimum of 48 hours and a maximum of 96 hours after the nuts have been rotated as indicated in Section 635.3 F.3.d above. Tightness of the top nuts shall be checked by applying the verification torque to the nut. See Table 1 for verification torque.

Table 2

Nut Rotation for Turn-Of-Nut Pretensioning

	Nut Rotation from Snug-Tight Condition a, b						
Anchor Rod Diameter	F1554 Grade 36,	F1554 Grade 55 and 105, A449					
(in)*	A307						
< 1 ½	1/6 Turn	1/3 Turn					
≥ 1 ½	1/12 Turn	1/6 Turn					
a. Nut rotation is relative to anchor rod. The tolerance is plus 20 degrees							
b. Applicable only to double-nut-movement joints.							

Bottom leveling nuts shall be in contact with the base prior to applying the torque. An inability to achieve the verification torque indicates that the threads have stripped and the anchor bolt must be replaced. All costs for replacing anchor bolts shall be at the Contractor's expense.

**f.** Install jam nut after verification torque has been applied to top nut. Lubricate threads of jam nut with beeswax or equivalent and tighten to a torque of 100 ft-lb (approximated without the use of a torque wrench).

# Section 635.3 H – Page 382 – Delete the first paragraph and replace with the following:

Traffic signal conductors shall be continuous from the controller cabinets to the pole bases. Splicing of conductors will not be allowed in the junction boxes.

# Section 635.3 R.3 – Page 384 – Delete the first sentence in the first paragraph and replace with the following:

All circular red, red arrow, circular yellow, yellow arrow, circular green, green arrow, and pedestrian indications shall be light emitting diode (LED) signal modules.

# Section 635.5 E – Page 386 – Delete and replace with the following:

**D.** Anchor Bolts: Cost for anchor bolts shall be included in the contract unit price for the concrete for which they are incorporated with.

#### Section 670.3 – Page 393 – Delete and replace with the following:

**A.** General Requirements: Concrete for drop inlets shall be proportioned, mixed, hauled, and placed in accordance with Section 462.

When the foundation for a drop inlet is in new embankment, the embankment shall be constructed to an elevation at least one foot (300 mm) above the footing before the foundation for the drop inlet is prepared. The foundation shall be compacted as specified for the adjacent embankment.

Castings shall be set in full mortar beds or secured as specified. Castings shall be set accurately to the correct elevation so subsequent adjustment will not be necessary.

Inlet and outlet pipe connections shall be of the same size and kind and shall meet the same requirements as the pipe they connect. Pipe sections shall be flush on the inside of the structure wall and project outside sufficiently for proper connection with the next pipe section. Masonry shall fit neatly and tightly around the pipe. Grouting of the pipe connection may be required as directed by the Engineer if voids exist after form removal.

Drop inlets shall be either cast in place or precast. Precast drop inlets shall be defined as those drop inlets cast outside of the project limits. Drop inlets cast within the project limits will be considered cast in place.

**B.** Cast in Place Drop Inlets: The foundation excavated for drop inlets shall be thoroughly moistened immediately prior to placing concrete.

Steel reinforcement shall be placed in accordance with Section 480.

The finished surface of the concrete shall present a neat and smooth appearance. Concrete shall be protected and cured in accordance with Section 460.3, except the minimum curing time shall be 72 hours.

Upon completion and curing of the unit, the sheeting, bracing, forms, and falsework shall be removed and the excavation backfilled. The unit shall not be backfilled until the completion of the 72 hour curing period, or until the concrete reaches a minimum compressive strength of 3000 psi (21 MPa). Backfill shall be placed in layers not exceeding six inches (150 mm) thick and compacted to the same degree as specified for the adjacent embankment. Installations shall be finished completed and left in a neat appearing condition.

- C. Precast Drop Inlets: Precast drop inlets shall conform to the following requirements:
  - **1. Notification:** The Contractor shall notify the Engineer 24 hours in advance of all concrete pours for inspection and observation of Contractor testing:
  - 2. **Design:** Precast drop inlets shall conform to the configurations of the standard plates. Variations from the standard plates may be accepted provided the AASHTO materials, design, fabrication specifications, and the requirements of this section are complied with.

Precast drop inlets shall be designed to specified load conditions. The Design Engineer of the drop inlets must be registered in the State of South Dakota. The design shall conform to the AASHTO design requirements for the depth of fill, including surfacing, etc., as well as live load or specified loading.

The Contractor shall furnish a checked design with the shop drawings. A checked design shall include the design calculations, and check design calculations performed by an independent Engineer registered in the State of South Dakota.

- 3. Shop Drawings: Fifteen days prior to fabrication, the Contractor shall furnish shop drawings for Department review. The shop drawings shall consist of fabrication details including reinforcing steel and spacer placement and configurations, total quantities for the complete item, and all information for fabrication and erection.
- **4. Forms:** The forms shall be designed to withstand the fluid pressure of the concrete and the added forces due to vibration and impact without distortion. The forms shall be mortar tight and free from warp.

The form surface area in contact with the concrete shall be treated with an approved form oil or wax before the form is set in position. The forms shall be thoroughly cleaned of all other substances.

**5.** Concrete Cure: The concrete shall be cured by low pressure steam, radiant heat, or as specified in Section 460.3 N. When curing in accordance with Section 460.3 N., the concrete temperature requirements of Section 460.3 O. shall apply.

Low pressure steam or radiant heat curing shall be done under an enclosure to contain the live steam or the heat and prevent heat and moisture loss. The concrete shall be allowed to attain initial set before application of the steam or heat. The initial application of the steam or heat shall be three hours after the final placement of concrete to allow the initial set to occur. When retarders are used, the waiting period before application of the steam or radiant heat shall be five hours. When the time of initial set is determined by ASTM C 403, the time limits described above may be waived.

During the waiting period, the minimum temperature within the curing chamber shall not be less than  $50^{\circ}$  F ( $10^{\circ}$  C) and live steam or radiant heat may be used to maintain the curing chamber between  $50^{\circ}$  F ( $10^{\circ}$  C) and  $80^{\circ}$  F ( $27^{\circ}$  C). During the waiting period the concrete shall be kept moist.

Application of live steam shall not be directed on the concrete forms causing localized high temperatures. Radiant heat may be applied by pipes circulating steam, hot oil, hot water, or by electric heating elements. Moisture loss shall be minimized by covering exposed concrete surfaces with a plastic sheeting or by applying an approved liquid membrane curing compound to exposed concrete surfaces. The top surface of concrete members for use in composite construction shall be free of membrane curing compound residue unless suitable mechanical means for full bond development are provided.

During the initial application of live steam or radiant heat, the concrete temperature shall increase at an average rate not exceeding  $40^{\circ}$  F  $(22^{\circ}$  C) per hour until the curing temperature is reached. The maximum concrete temperature shall not exceed  $160^{\circ}$  F  $(71^{\circ}$  C). The maximum temperature shall be held until the concrete has reached the desired strength. After discontinuing the steam or radiant heat application, the temperature of the concrete shall decrease at a rate not to exceed  $40^{\circ}$  F  $(22^{\circ}$  C) per hour until the concrete temperature is within  $20^{\circ}$  F  $(11^{\circ}$  C) of the ambient air temperature. The Contractor will not be required to monitor this cool down temperature when the ambient air temperature is  $20^{\circ}$  F  $(11^{\circ}$  C) or above.

The test cylinders shall be cured with the unit, or in a similar manner (similar curing method and concrete curing temperature, as approved by the Concrete Engineer) as the unit, until minimum compressive strength has been obtained.

6. Surface Finish and Patching: If a precast or prestressed item shows stone pockets, honeycomb, delamination or other defects which may be detrimental to the structural capacity of the item, it will be subject to rejection at the discretion of the Engineer. Minor surface irregularities or cavities, which do not impair the service of the item, and which are satisfactorily repaired will not constitute cause for rejection. Repairs shall not be made until the Engineer has inspected the extent of the irregularities and has determined whether the item can be satisfactorily repaired. If the item is deemed to be repairable, the repair method and procedures shall be agreed upon by the Department and fabricator prior to the work commencing.

Depressions resulting from the removal of metal ties or other causes shall be carefully poainted with a mortar of sand and cement in the proportions, which are similar to the specific class of concrete in the unit. A sack rub finish is required on prestressed beams except for the bottom of the bottom flange and the top of the top flange. A sack rub finish is also required on sloped surfaces of box culvert end sections.

- 7. Fresh Concrete Testing: The Contractor shall be responsible for performing all fresh concrete testing in accordance with the materials manualMaterials Manual. Tests shall be documented on a DOT-54 form and submitted to the Engineer.
- 8. Concrete Compressive Strength: The Contractor shall make a minimum of one group of test cylinders for each class of concrete for each day's production, not to exceed 150 cubic yard (125 cubic meters) per group of cylinders.

At a minimum, a group of test cylinders shall consist of the following:

- a. Two test cylinders are required for the 28 day compression test.
- **b.** Two additional cylinders will be required for determining concrete strength, when the Contractor desires to make delivery and obtain acceptance by the Department prior to the 28 day compression test.

Acceptance of the precast units shall be in accordance with Section 460.3 B. The precast units will be accepted when the minimum design concrete compressive strength requirements have been met. Accepted precast units represented by that test group of cylinders may be delivered to the project and will not require the 28 day cylinder test.

The Engineer will be responsible for breaking of all concrete cylinders for concrete compressive strength in accordance with the Materials Manual.

# Section 670.5 – Page 394 – Add the following paragraph after the first paragraph:

Unless otherwise specified in the plans the cost for removal of existing pipe, if necessary, to facilitate the installation of new drop inlets shall be incidental to the associated drop inlet contract unit prices.

## Section 671.5 – Page 397 – Add the following paragraph to this section:

Unless otherwise specified in the plans the cost for removal of existing pipe, if necessary, to facilitate the installation of new manholes shall be incidental to the associated manhole contract unit prices.

# Section 720.4 – Page 405 – Delete this section and replace with the following:

- **A.** Bank and Channel Protection Gabions: Bank and channel protection gabions will be measured to the nearest 0.1 cubic yard (0.1 cubic meter). If a substitution is made, the dimensions of the bank and channel protection installed shall be equal to or greater than the dimensions specified. Payment will be based on plans quantity, unless changes are ordered in writing by the Engineer.
- **B. Drainage Fabric:** Drainage fabric will be measured to the nearest square yard (square meter). The lap at joints will not be included in the measurement.

#### Section 720.5 – Page 405 – Delete this section and replace with the following:

- **A. Bank and Channel Protection Gabions:** Bank and channel protection gabions will be paid for at the contract unit price per cubic yard (cubic meter). Payment will be full compensation for materials, equipment, labor, excavating, shaping and incidentals required.
- **B. Drainage Fabric:** Drainage fabric will be paid for at the contract unit price per square yard (square meter). Payment will be full compensation for furnishing and installing the drainage fabric as specified. Payment will be for plan quantity unless changes are ordered in writing.

#### Section 730.2 C – Page 407 – Delete the fourth sentence and replace with the following:

If the seed is not planted within the 9 month period, the Contractor shall have the seed retested for germination, as described above, and a new certified test report shall be furnished prior to starting seeding operations.

#### Section 734.3 – Page 423 – Add the following paragraph before the first paragraph:

The Contractor shall designate an employee as Erosion Control Supervisor whose responsibility is the construction and maintenance of erosion and sediment control. This person shall be available to be reached by phone 24 hours a day, 7 days a week, and must be able to respond to emergency situations at the job site within 12 hours. The person so designated must have training and be certified by the South Dakota Department of Transportation in the area of erosion and sediment control. The name, phone number, and location of the person shall be provided to the Department at the preconstruction meeting.

#### Section 734.3 B.2 – Page 424 – Delete the second sentence and replace with the following:

The muck will be removed when the surface of the muck is at approximately one-third the height of the silt fence.

#### Section 750 – Page 431 – Add the following after the second paragraph:

In addition to the certification requirement specified in SD 416, when limestone is used as a processing addition, the manufacturer shall certify the nature of the addition, the amount used as a percentage of Portland cement clinker, the percentage of Calcium Carbonate, identity of any additions used, and shall supply comparative test data on chemical and physical properties of the cement with and without the limestone. The comparative tests do not supersede the normal testing to confirm that the cement meets chemical and physical requirements.

#### Section 800.2 D – Page 436 – Add the following sentence to the end of the fourth paragraph:

Fine aggregate with a 14 day expansion value of 0.400 or greater shall not be used.

#### Section 800.2 D – Page 436 – Add the following sentence to the end of the last paragraph:

The expansion value of the blended sources will be used to determine the type of cement required.

#### Section 800.2 F – Page 437 – Delete the last three sentences of the first paragraph and replace with the following:

If the fineness modulus falls outside this limit the Concrete Engineer shall be notified. A new or adjusted mix design may be provided or approved. The uniformity of grading requirements do not apply to fine aggregate for Low slump Dense Concrete and Class M (I) concrete.

#### Section 800.2 F – Page 437 – Delete the first sentence of the second paragraph and replace with the following:

For determining the FM deviation from the design mix FM, the average of the five most recent FM test shall be used.

#### Section 800.2 F – Page 437 – Delete the first sentence of the last paragraph and replace with the following:

Additionally for Portland Cement Concrete Paving conforming to Section 380; the FM of the fine aggregate, as established by the mix design, will be from 2.40 to 3.10 (wide band).

# Section 821.1 A – Page 444 – Delete and replace with the following:

# 

White non-woven polypropylene geotextile conforming to the following requirements may be used in lieu of burlap for horizontal applications only. This material is not to be used for curing vertical surfaces.

Property	Test Method	Unit	Min. Ave. Roll Value
Weight	ASTM D 5261	Oz/Sq. Yd.	8.0

# Section 821.1 D.2 – Page 444 – Delete the second sentence and replace with the following:

Compound stored for a period in excess of six months will require resampling and testing for compliance prior to use.

# Section 870.1 A – Page 452 – Delete this section and replace with the following:

**A. Hot Poured Elastic Joint Sealer:** The sealant shall conform to the requirements of ASTM D 6690 Type II or Type IV or be on the Departments approved products list for Joint Sealants for Asphalt Over Long Jointed Concrete Payement.

Hot poured elastic joint sealer meeting the requirements of ASTM D 6690 Type IV shall not weigh more than  $9.35 \, lbs/gal \, (1.12 \, kg/L)$ .

Test methods shall conform to ASTM D 5329, except the fine aggregate used in preparing the concrete test blocks shall conform to Section 800. The Contractor shall furnish a certificate of compliance for hot poured elastic joint sealer not listed on the approved products list.

Section 880.2 A - Table 1, under Class E, Type 1 – Page 455 – No. 4 (4.75 mm) Sieve – Delete the "45-70" requirement and replace with "45-75".

# Section 880.2 A – Page 456 – Delete the first note under Table 1 and replace with the following:

\* - A tolerance of 3 percent may be retained on the ¾" (19.0 mm) sieve provided all material passes the 1" (25 mm) sieve.

# Section 882.2 – Page 459 – Delete Table 1 and replace with the following:

Table 1

REQUIREMENT	Subbase	Gravel Cushion	Granular Bridge End Backfill	Aggregate Base Course	Limestone Ledge Rock		Gravel Surfacing
REQUIREMENT	Subbase	Cusinon	Dackiiii	Course	Base Course	Gravel Cushion	Surfacing
SIEVE			PERCEN	NT PASSING	+		
2" (50 mm)	100						
1" (25.0 mm)	70-100		100	100	100		
3/4" (19.0 mm)		100	80-100	80-100	80-100	100	100
½" (12.5 mm)			68-91	68-91	68-90		
No. 4 (4.75 mm)	30-70	50-75	42-70	46-70	42-70	46-70	50-78
No. 8 (2.36 mm)	22-62	38-64	29-58	34-58	29-53	29-53	37-67
No. 40 (425 μm)	10-35	15-35	10-35	13-35	10-28	10-28	13-35
No. 200 (75 μm)	0.0-15.0	3.0-12.0	0.0-5.0	3.0-12.0	3.0-12.0	3.0-12.0	4.0-15.0
Liquid Limit Max		25	25	25	25	25	
Plasticity Index	0-6	0-6	0-6	0-6	0-3	0-3	4-12
L.A. Abra. Loss, max.	50	40	40	40	40	40	40
Foot Notes		2	1,2	1,2			
Processing Required	crushed	crushed	crushed	crushed	crushed	crushed	crushed

Section 890.2 G – Page 465 – In the table, under TESTS ON RESIDUE FROM DISTILLATION TESTS, add the following after Elastic Recovery @  $50^{\circ}$ F ( $10^{\circ}$ C):

(see Note 4)

# Section 890.2 G - Page 465 - Add the following after Note 3:

Note 4: The Elastic Recovery test shall be in accordance with AASHTO T301, except that the residue will be obtained by distillation, not oven evaporation. The distillation temperature shall be as recommended by the emulsion manufacturer.

#### Section 972.2 B – Page 479 – Delete the second paragraph and replace with the following:

For bolts that are 1" (M24) (incl.) in diameter and less, the maximum hardness for AASHTO M164 (ASTM A325) bolts shall be 33 Rc.

# Section 972.2 C – Page 483 – Add the following paragraph before the second to last paragraph:

Jam nuts shall conform to ASTM A563 Grade A.

# Section 980.1 A.1 – Page 485 – Delete this section and replace with the following:

when tested in accordance with ASTM D 562 (See Note 2)

#### 1. Quantitative Requirements: The finished paint shall meet the following quantitative requirements:

WHITE

YELLOW

<u>Lead</u> , parts per million max. ASTM D 3335 or X-ray fluorescence	100	100
Pigment, percent by weight	60.0 - 62.5	58.5 – 61.0
Pigment, percent by weight; when tested in accordance with ASTM D 3723 (See Note 1)	60.0 - 62.5	56.1 - 58.6
Note 1: The residual extracted pigment upon analysis shall conform compositional requirements when tested in accordance with ASTM	-	•
Titanium Dioxide ASTM D 476 Type II Rutile 92% min. Ti0 <sub>2</sub> tested in accordance with ASTM D 1394 or ASTM D 4764	1.00 lb/gal min.	0.20 lb/gal min.
Total Solids, percent by weight; min. when tested in accordance with ASTM D 3723	77.0	76.1
Non-volatile Vehicle, percent by weight vehicle; min. when tested in accordance with FTMS 141c (Method 4051.1)	42.5	42.5
<u>Consistency</u> . Krebs-Stormer Shearing rate 200 r.p.m. Grams	190 to 300	190 to 300
Equivalent K.U.	80 to 95	80 to 95

Note 2: The consistency of the paint shall be within the stated specification when determined a minimum 48 hours after packaging the material.

Weight per Gallon, pounds minimum	Rohm & Haas	13.85	13.30
when tested in accordance with	Dow DT 250NA	13.75	13.20
ASTM D 1475 (See Note 3)			

Note 3: In addition to compliance with the minimum, the weight per gallon shall not vary more than  $\pm$  0.3 lbs / gal. between batches.

<u>Fineness of Dispersion</u>	2 min.	2 min
Hegman Scale, min. when tested in accordance	"B" Cleanliness"	B" Cleanliness
with ASTM D 1210		

 $65 \pm 3\%$ , the temperature  $73.5 \pm 3.5^{\circ}$ F ( $23 \pm 2^{\circ}$ C), and air flow less than one foot (1') per minute.

Drying Time, Dry-through, Minutes

120max.

120max.

max. when tested in accordance with ASTM 1640, except the wet film thickness shall be  $12.5 \pm 0.5$  mils. The applied film shall be immediately placed in a laboratory drying chamber maintaining the relative humidity at  $90 \pm 3\%$ , and the temperature  $23 \pm 2^{\circ}$ C. The pressure exerted will be the minimum needed to maintain contact between the thumb and film. A reference-control paint will be run in conjunction with the candidate paint. Rohm and Haas formulation will be referenced-control paint.

Note 4: If either the candidate or reference-control paint exceeds the 120 minute maximum, then the candidate paint shall not exceed the dry time of the reference-control paint by more than 15 minutes.

#### Field Drying Time, Track-Free, minutes max.

2

2

When applied under the following conditions, the line shall show no visual tracking when viewed from 50 feet after driving a passenger vehicle over the line at a speed of 25-35 mph:

Fifteen mils wet film thickness

Six lbs. of glass beads per gal. of paint

Paint temperature at nozzle between 70 to 120°F

Pavement dry, pavement temperature 50 to 120°F

Relative humidity of 85% maximum

Direct	ional	Ret	<u>lectance,</u>	min	imum.

35

50

when applied at a wet film thickness of 15 mils and when tested in accordance with ASTM E 1347 (Illuminate C  $2^{\circ}$ )

#### pH, minimum.

9.80

9.80

when tested in accordance with ASTM E70

# Dry Opacity, Contrast ratio, min.

0.955

0.880

when applied at a wet film thickness of 6 to 7 mils and when tested in accordance with FTMS 141c (Method 4121 Illuminate C  $2^{\circ}$ )

Volatile Organic Content (VOC), max.

115 g/liter

115 g/liter

in accordance with ASTM D 3960

Flash Point, closed cup, min.

115°F

115°F

<u>Color:</u> The paint shall meet the color specification limits and luminance factors listed in Tables 1 & 2 when tested in accordance with ASTM E1347 or ASTM E1349. The paint shall not discolor in sunlight and shall maintain the colors and luminance factors throughout the life of the paint. No Bayferrox 3950, iron oxides or other color enhancers will be permitted to achieve the color chromaticity coordinates.

Table 1\*

	Chromaticity Coordinates (corner points)						Min. Luminance		
Color	X	Y	X	Y	X	Y	X	Y	Factor (Y %)
White	0.355	0.355	0.305	0.305	0.285	0.325	0.335	0.375	35
Yellow	0.560	0.440	0.490	0.510	0.420	0.440	0.460	0.400	25

<sup>\*</sup> Daytime Color Specification Limits and Luminance Factors for Pavement Markings Material with CIE 2° Standard Observer and 45/0 (0/45) Geometry and CIE Standard Illuminant D65

Table 2\*\*

Color	Chromaticity Coordinates (corner points)							
	1		2		3		4	
	X	Y	X	Y	X	Y	X	Y
White	0.480	0.410	0.430	0.380	0.405	0.405	0.455	0.435
Yellow	0.575	0.425	0.508	0.415	0.473	0.453	0.510	0.490

\*\* Nighttime Color Specification Limits for Pavement Marking Retroreflective Material With CIE 2° Standard Observer, Observation Angle = 1.05°, Entrance Angle + 88.76° and CIE Standard Illuminant A.

#### Section 981.1 – Page 489 – Delete this section and replace with the following:

Glass beads for use with pavement marking paint shall be moisture resistant and shall meet the requirements of AASHTO M 247, Type I. The glass beads shall be without floatation properties. The glass beads shall have dual surface treatment consisting of a moisture resistant silicone treatment, and silane adherence surface treatment. The glass beads shall have a minimum of 80% true spheres. Roundness shall be tested in accordance with SD 510.

# Section 983.1 – Page 499 – Delete the third sentence of the first paragraph:

Section 983.1 B – Page 499 – Delete this section in it's entirety.

Section 983.2 B – Page 500 – Delete this section in it's entirety.

#### Section 985.1 D – Page 506 – Delete the last two sentences of the first paragraph and replace with the following:

Vertical reinforcement shall be deformed unless otherwise noted and shall conform to the requirements of ASTM A 615/AASHTO M 31 Grade 60 (400). Circular ties, stirrups, and spiral reinforcing may be fabricated from deformed bars conforming to the requirements of ASTM A 615/AASHTO M31 Grade 60 (400). Spiral reinforcing may also be fabricated from cold drawn wire conforming to ASTM A 82 or hot rolled plain bars conforming to ASTM A 615/AASHTO M 31 Grade 60 (400).

## Section 985.1 G.4 – Page 508 – Delete the first sentence and replace with the following:

Conductor insulation shall be colored in accordance with ICEA S-95-658, Method 1, Table K-2.

#### Section 985.1 G.5 – Page 508 – Delete the first sentence and replace with the following:

Jackets shall be polyvinyl chloride meeting UL requirements for Class 12 jackets and ICEA S-95-658, Section 4.

#### Section 985.1 I.1.b – Page 508-509 – Delete the last sentence in the paragraph:

#### Section 985.1 N – Page 514 – Delete the second sentence in the fifth paragraph and replace with the following:

The flash control circuit shall ensure that remote transfer to flashing from normal stop and go operations occurs during the end of the mainline green interval in the cycle.

# Section 985.1 N.1 and 2 – Page 515 – Delete these two sections and replace with the following sentence:

The controller furnished shall meet current NEMA TS2 standards for controllers.

#### Section 985.1 Q.7 – Page 516 – Delete and replace with the following:

7. Backplates for Signal Heads: Unless otherwise stated on the plans, backplates may be either 0.050 inch (1.27 mm) thick aluminum or 0.125 inch (3.18 mm) thick polycarbonate. The polycarbonate backplates must be made up from no more than two pieces.

# Section 990.1 A.2.a – Page 517 – Delete and replace with the following:

a. Portland cement shall conform to Section 750.

# Section 1010.1 A – Page 519 – Add the following to the end of the first sentence:

Bar reinforcement shall be deformed, unless otherwise noted.

\*\*\*\*

# STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

# SPECIAL PROVISION FOR PRICE SCHEDULE FOR MISCELLANEOUS ITEMS

# **OCTOBER 3, 2007**

The following unit bid prices have been established by the Transportation Commission.

These prices will be pre-entered on the Bid Schedule sheets for each project or will establish a standard price to be used whenever no project contract unit price exists for that item.

Each unit price listed is considered full compensation for the cost of labor, material, and equipment to provide the item of work and/or material, complete in place, including (but not limited to) royalty, waste of unsuitable materials, equipment rental, overhead, profit, and incidentals.

Items specified in this document may be paid for on progressive estimates without the benefit of a prior approved Construction Change Order.

Use the equivalent metric unit prices that are listed in parenthesis below the item prices on metric projects.

Specification Section Number	Specification Section Name	Item Name	Price Per Item
5.8	Construction Stakes, Lines and Grades	Three-Man Survey Crew	\$110.00/hour
7.7	Public Convenience and Safety	Water	\$11.50/M.Gal (\$3.04/cubic meter)
9.3	Payment for extra haul of Materials	Extra Haul	\$0.12/ton mile (\$0.08/mton kilometer)
120.5 A.4.	Roadway and Drainage Exc. & Emb.	Unclassified Excavation Digouts	\$5.00/cu. yd. (\$6.54/cubic meter)
120.5 G.	Roadway and Drainage Exc. & Emb.	Extra Haul	\$0.04/cu. yd. station (\$1.72/cubic meter station)
120.5 H	Roadway and Drainage Exc. & Emb.	Water for Embankment	\$11.50/M. Gal (\$3.04/cubic meter)
421.5	Undercutting Pipe & Plate Pipe	Undercutting Culverts	\$12.00/cu. yd. (\$15.69/cubic meter)
510.5 D.	Timber, Prestressed, and Steel Piles	Timber Pile Splice	\$400.00/each
		Steel Pile Splices (* All Weights)	Splice made after one of the pieces has been

Г	1		1
			driven.
		8 HP*	\$190.00/each
		(HP 200)	
		10 HP*	\$270.00/each
		(HP 250)	
		12 HP*	\$330.00/each
		(HP 300)	
		14 HP*	\$390.00/each
		(HP 350)	φε 9 010 0γ <b>ε ω</b> είτ
		(11 330)	Splice made before
			either of the pieces
			has been driven.
		8 HP*	\$65.00/each
		-	\$05.00/each
		(HP 200) 10 HP*	\$85.00/each
			\$65.00/each
		(HP 250)	¢100.00/_1
		12 HP*	\$100.00/each
		(HP 300)	Φ120 00/ 1
		14 HP*	\$120.00/each
		(HP 350)	<b>.</b>
510.5 E	Timber, Prestressed,	Pile Shoes (Timber	\$50.00/each
	and Steel Piles	Pile)	
510.5.H	Timber, Prestressed,	Pile Tip	
	and Steel Piles	Reinforcement (Steel	
		Pile)	
		10" (250mm) HP Tip	\$60.00/each
		Reinforced	
		12" (300 mm) HP Tip	\$70.00/each
		Reinforced	
		14" (350 mm) HP Tip	\$85.00/each
		Reinforced	
601.5	Haul Roads	Granular Material	\$5.00/ton
001.5	Tiudi Roudi	Similardi Muccilui	(\$5.51/mton)
601.5	Haul Roads	Asphalt Concrete	\$45.00/ton
001.3	Traur Roads	(including asphalt)	(\$49.60/mton)
601.5	Haul Roads	· · · · · · · · · · · · · · · · · · ·	\$16.00/ton
001.3	Haul Koaus	Cover Aggregate	·
601 F	Houl Doods	A amb alt /Ta ala Daine	(\$17.63/mton)
601.5	Haul Roads	Asphalt (Tack, Prime,	\$300.00/ton
		Flush & Surface	(\$330.00/mton)
201 F	II ID 1	Treatment)	Φ11 50 B 5 C 1
601.5	Haul Roads	Water	\$11.50/M. Gal.
		D G	(\$3.04/cubic meter)
601.5	Haul Roads	Dust Control	\$0.30/lb
		Chlorides	(\$0.66/kg)
634.5	Traffic Control	Flagging	\$21.74/hour
634.5	Traffic Control	Pilot Car	\$34.70/hour
057.5	Truffic Collinoi	I Hot Cai	φ5 1.7 0/110 α1

\* \* \* \* \*