

Department of Transportation

Mitchell Region Office

PO Box 1206

Mitchell, SD 57301-7206 605/995-8129

FAX: 605/995-8135

June 5, 2007

Mrs. June Hansen Civil Rights Officer Department of Transportation 700 Broadway Avenue East Pierre, South Dakota 57501

RE: 029 N-291, Union County – PCN I0NV

Cantilever Signing, Signing Modification & Guardrail

On I29N between Exit 1 and Exit 4

Dear Mrs. Hansen:

Enclosed is a Contract Proposal and plans for the above referenced project that is being let to contract by the informal bidding procedure in the Mitchell Region on June 27, 2007.

We have sent a proposal to the DBE/WBE Contractors listed below:

Buskerud Construction Inc.

Construction Signing Corp.

Guardrail Enterprises Inc.

If you know of any other interested Contractors, please advise us.

Very truly yours,

DEPARTMENT OF TRANSPORTATION

Thomas L. Week Region Engineer

Monte D. Rice
Region Design Engineer

cc: Fuller - Operations

Peterson/Gall - Yankton Area



Department of Transportation

Mitchell Region Office

PO Box 1206 Mitchell, SD 57301-7206 605/995-8129

FAX: 605/995-8135

June 5, 2007

TO: Interested Bidders

RE: 029 N-291, Union County – PCN I0NV

Cantilever Signing, Signing Modification & Guardrail

On I29N between Exit 1 and Exit 4

The South Dakota Department of Transportation (SDDOT) desires to solicit bids for Cantilever Signing, Signing Modification & Guardrail on I29N between Exit 1 and Exit 4. Refer to the enclosed plans for location and details of the work to be done.

A Contract Proposal (DOT 123) form, a Participation by Minority Contractors form and a Contractor's Affidavit/Declaration form are enclosed for submission of your bid. Be sure to have the forms signed and notarized as indicated on the forms. FAX bids will not be accepted.

If you submit a bid for these projects, a bid bond, certified check, cashier's check, or bank draft will be required for NOT LESS THAN FIVE (5) PERCENT OF THE TOTAL AMOUNT OF THE BID. Except for the lowest bidder on the project, all guarantees will be returned immediately following the receipt and checking of all bids.

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. The performance bond must be written by South Dakota Resident Agents or be counter signed by South Dakota Resident Agents. If a cash performance bond is provided, it will not be returned for one (1) year after the completion of the project.

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

All bid proposals must be returned in the enclosed self-addressed envelope to Thomas L. Week, Region Engineer, 1300 S. Ohlman St., Post Office Box 1206, Mitchell, South Dakota 57301-7206 before 1:30 P.M. on Wednesday, June 27, 2007.

Proposal and Plans (and Addenda, when applicable) can be accessed at the following link: http://www.sddot.com/pe/projdev/bidlet_lettings_regional.asp. It is the Contractor's responsibility to obtain any addenda pertaining to this contract prior to submitting a bid. Addenda, if and when applicable to this contract, will be posted on this website with the contract.

Questions regarding the plans and/or proposal should be directed to: Ron Peterson (Ext. 13) or Rodney Gall (Ext. 14) at 605 668-2931 or Monte Rice at 605-995-8129.

The SDDOT reserves the right to reject any or all bids.

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

Very truly yours,

DEPARTMENT OF TRANSPORTATION

Thomas L. Week, Region Engineer

Monte D. Rice, Region Design Engineer

cc: Fuller - Operations
Hansen - Civil Rights
Reiss - Planning & Programs
Peterson/Gall - Yankton Area
Dahme - Materials
Larson - Bridge Maintenance
Jansen/Hammond - Region Traffic

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION CONTRACT PROPOSAL

	PROJECT		Τ	MAINT	CONTROL			BEGIN	END
CODE	PRE	ROUTE	AGR	UNIT	REFERENCE	AFE	FUNCTION	MRM	MRM
		029 N		291		IONV	2404	1.3	3.3

		029 N	291	IONV	2404	1.3		3.3	
CITY AND/OR COUNTY: Union County						BUDGET SOURCE	:	Contract Main	tenance
FINALS ENGINEER REVIEW REQUIRED: ✓ YES						□ NO			
	REGION MA	TERIALS CE	RTIFICATIO	N REQUIRED:	✓ YES	□ NO			
	CERTIFIED	INSPECTORS	S/TESTERS	REQUIRED:	✓ YES	□ NO			
	TO BE INST	ALLED ON C	M&P:		✓ YES	□ NO			
TYPE, PURPOSE AND LOCATION OF WORK: Cantilever Signing, Signing Modification & Guardrail on I29 between Exits 1 & 4.									
ESTIMATE OF QUANTITIES AND COST									
BID ITEM									
NUMBER			ITE	VI		QUANTITY	LINIT	LINIT PRICE	AMOUNT

BID ITEM					
NUMBER	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
009E0010	Mobilization	Lump Sum	LS	Lump Sum	
110E0100	Remove Concrete Footing(s)	Lump Sum	LS	Lump Sum	
110E0700	Remove 3 Cable Guardrail	270	Ft		
110E0740	Remove 3 Cable Guardrail Anchor Assembly	2	Each		
110E5020	Salvage Traffic Sign	2	Each		
110E6010	Remove 3 Cable Guardrail Anchor Assembly for Reset	1	Each		
629E0100	3 Cable Guardrail	302	Ft		
629E0400	3 Cable Guardrail Anchor Assembly	2	Each		
629E0420	3 Cable Guardrail Anch Assembly w/ New Anch and Salv Hardware	1	Each		
629E1102	3 Cable Guardrail Intermediate Post	5	Each		
632E0014	1.75' Diameter Breakaway Support Concrete Footing	8	Ft		
632E0072	4' Diameter Fixed Support Concrete Footing	32	Ft		
632E1225	W6x12 Steel Post	30.4	Ft		
632E3103	Extruded Aluminum Sign, Removable Copy High Intensity	339	SqFt		
632E3520	Remove, Salvage, Relocate and Reset Traffic Sign	1	Each		
632E5020	Overhead Cantilever Sign Support	2	Each		
634E0010	Flagging	20	Hour	\$20.52	
634E0100	Traffic Control	673	Unit		
634E0120	Traffic Control Miscellaneous	Lump Sum	LS	Lump Sum	
634E0420	Type C Advance Warning Arrow Panel	2	Each		
				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	COMPLETION DATE
SUBSCRIBED AND SWORN TO BEFORE ME THE	SIGNATURE
DAY OF, 20	COMPANY
	ADDRESS
NOTARY - My Commission Expires	FEDERAL TAX ID NUMBER

DOT-123 (4/05) 2 of 2

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION CONTRACT PROPOSAL

	PROJECT		Γ	MAINT	CONTROL			BEGIN	END
CODE	PRE	ROUTE	AGR	UNIT	REFERENCE	AFE	FUNCTION	MRM	MRM
		029 N		291		IONV	2404	1.3	3.3

RECOMMENDED FOR APPI	ROVAL:				
		CONSTRUCTION	CONSTRUCTION/MAINTENANCE ENGINEER		
REGION ENGINEER DATE		DIRECTOR OF O	_	DATE	
APPROVED FOR THE TRAN	NSPORTATION COMM	ISSION			
NAME		TITLE		DATE	
APPROVED as per Federal	Highway Stewardship	Provisions this	day of		_ , 20
PROJECT DEVELOPMENT	ENGINEER				

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

Utilization of Minority Business Enterprises Clauses

PR	ROJECT: 029 N-291	PCN IONV
СО	DUNTY: UNION	
1.	The Contractor agrees to use his best efforts to carry out this policy in the award of his subcontextent consistent with the efficient performance of his contract. As used in this contract, 'Minor Enterprise' or 'MBE' means a small business concern, as defined pursuant to section 3 of the Stand implementing regulations, which is owned and controlled by one or more minorities or work controlled' means a business: (a) Which is at least 51 per centum owned by one or more minorities or work of publicly owned business, at least 51 per centum of the stock of which is owned by minorities or women; and (b) Whose management and daily business operations are controlled such individuals. 'Minority' means a person who is a citizen or lawful permanent resident of the and who is: (a) Black (a person having origins in any of the black racial groups of Africa); (b) H of Spanish or Portuguese culture with origins in Mexico, South or Central America or the Carib regardless of race); (c) Asian American (a person having origins in any of the original peoples of Southeast Asia, the Indian subcontinent, or the Pacific Islands); or (d) American Indian and Alaperson having origins in any of the original peoples of North America); (e) Members of other grindividuals, found to be economically and socially disadvantaged by the Small Business Admin section 8(a) of the Small Business Act, as amended. Contractors may rely on written represent subcontractors regarding their status as minority business enterprise in lieu of an independent	rity Business Small Business Act nen. 'Owned and rities or women or, ry one or more d by one or more d United States ispanic (a person bean Islands, of the Far East, askan Native (a oups, or other istration under ttatives by
2.	The Contractor agrees to establish and conduct a program which will enable minority business considered fairly as subcontractors and suppliers under this contract. In this connection the Co	
	 (a) Designate a liaison officer who will administer the Contractor's minority business enterprises (b) Provide adequate and timely consideration of the potentialities of known minority business "make-or-buy" decisions. (c) Ensure that known minority business enterprises will have an equitable opportunity to compuse subcontracts, particularly by arranging solicitations, time for the preparation of bids, quantities, 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 polithis clause, including the establishment of a source list of minority business enterprises, (2) aw business enterprises on the source list, and (3) specific efforts to identify and award contracts to business enterprises. (e) Include the "Utilization of Minority Business Enterprises Clause" in subcontracts which offer minority business enterprises subcontracting opportunities. (f) Cooperate with the State's Contracting Officer in any studies and surveys of the Contractor business enterprises procedures and practices that the State's Contracting Officer may from the conduct. (g) Submit periodic reports of subcontracting to known minority business enterprises with respective to in subparagraph (d) above, in such form and manner and at such time (not more off as the State's Contracting Officer may prescribe. 	enterprises in all cete for specifications and cies set forth in cards to minority to minority r substantial 's minority me to time ect to the records
3.	The Contractor further agrees to insert in any subcontract hereunder provisions which shall conto the language of this clause, including this paragraph 3 and to notify the State's Contracting Contractors of such subcontractors.	
4.	The bidder hereby certifies that should he at any time decide to subcontract a portion of the wo affirmative action to seek out and consider minority business enterprises as potential subcontracertifies that he will maintain records showing the contacts made with potential minority business subcontractors and the results of such contacts.	actors. He further
Na	ame 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

PROJ	ECT:	029 N-291		PCN IONV
COUN	NTY:	UNION		
			(an individual) (a partnership) (a corporation)	
orincip submit any ac 3 year federa ousine	oal invest tted, have ction in re s none o al or state ess entity ich we ar	ify that I, We or any owner or partner he igator, project director or other position e not directly or indirectly, entered into estraint of free competitive bidding in confit the above have been suspended, determined a gency, been indicted, convicted, or he described herein by a court of competing currently under suspension or deband the above for any of the above listed resistant.	involved in management of the any agreement, participated in a nnection with the contract for the arred, voluntarily excluded or dead a civil judgment rendered against jurisdiction in any matter invenent. Nor is a proposed suspen	project for which this bid is any collusion, or otherwise take e project, and that within the latermined ineligible by any ainst any of the above or the olving fraud or official miscond
		IOMATURE RI COMA - B. REI CM	* * * *	
JOME	PLETESI	IGNATURE BLOCK <u>A. or B.</u> BELOW:		
۸.	Signed	I	(an individual) (a partnership) (a corporation)	
	Ву			
	Title _			
	County	<i>y</i> of)		
		of)):SS	
		ribed and sworn to before me this	day of	, 20
	(SEAL)		
	(OL/IL)	Notary Public	My Commission Expires	
			* * * *	
3.		the penalty of perjury under the laws of correct.	the United States, I hereby cert	ify that the above statement is
	Cianad	1	(an individual)	
	Signed	l	(a partnership) (a corporation)	
	Ву		· · ·	
	Title			

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION MITCHELL REGION

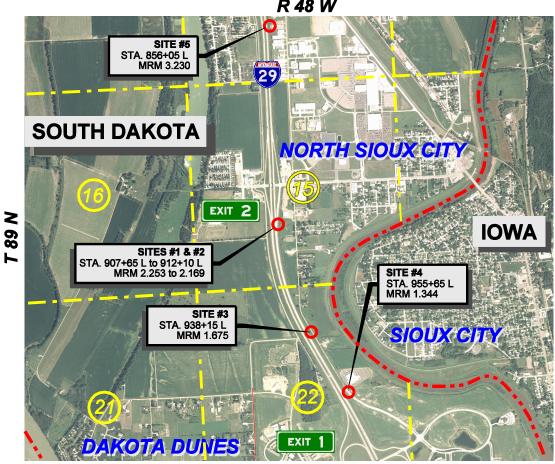
PROPOSAL FOR

PROJECT 029 N-291 INTERSTATE 29 **UNION COUNTY**

CANTILEVER SIGNING, SIGNING MODIFICATION & GUARDRAIL

PCN IONV







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.

PROJECT: 029 N-291 PCN IONV

COUNTY: UNION

TYPE OF WORK: CANTILEVER SIGNING, SIGNING MODIFICATION & GUARDRAIL

THE FOLLOWING ITEMS ARE INCLUDED IN THIS PROPOSAL FORM:

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

Special Provision for Anchor Bolt Tightening, dated 5/21/07.

Special Provision for Burner Fuel for Asphalt Concrete Pavement, dated 5/9/06.

Special Provision for Temporary Works, dated 10/6/05.

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 9/30/05.

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

Supplemental Specification to Standard Specifications for Roads and Bridges, dated 3/21/07.

Special Provision Regarding Price Schedule for Miscellaneous Items, dated 10/19/05.

Plans for Project – Sheets 1 through 25

* * *

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.

SPECIAL PROVISION FOR ANCHOR BOLT TIGHTENING

PROJECT 029 N-291, PCN I0NV UNION COUNTY

MAY 21, 2007

Modify Section 632, 635, & 972 of the Standard Specifications for Roads and Bridges as follows.

Delete Section 632.3 H.2.c 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.

Delete Section 635.3 F and replace with the following:

- **F. Anchor Bolts:** Anchor bolts shall be installed in accordance with the following requirements.
 - 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. The support cage used to position the anchor bolts within the foundation shall remain in the concrete foundation. 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 base 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.** 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 equal to 20% - 30% of the verification torque. See Table 1 for verification and snug tight torque values.

Table 1

Anchor Bolt Tightening

Anchor Bolt Diameter (in)	Anchor Bolt Stress Area (sq in)	Yield Strength (ksi)	Minimum Tensile Strength (ksi)	Verification Torque (ft-lbs)	30% Snug Tight Torque (ft-lbs)	20% Snug Tight Torque (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
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.
- **e.** Tightness of the nuts shall be checked in the presence of Department personnel a minimum of 48 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			
(in)*	A307	105, A449			
< 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).

Add the following paragraph before the second to last paragraph in Section 972.2 C:

Jam nuts shall conform to ASTM A563 Grade A.

* * * * *

SPECIAL PROVISION FOR BURNER FUEL FOR ASPHALT CONCRETE PAVEMENT

MAY 9, 2006

Delete the first sentence from the fourth paragraph of Section 320.3 B.1 from the Standard Specifications in its entirety and replace it 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.

SPECIAL PROVISION FOR

TEMPORARY WORKS

OCTOBER 6, 2005

Delete Section 423.1 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.

Add the following to the end of Section 423.3.A:

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.

Delete Section 423.5 and replace with the following:

423.5 BASIS OF PAYMENT

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

* * * * *

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(x, y, z) =
$$\left(\frac{CFI(x, y, z) - BFI(x, y, z)}{BFI(x, y, z)}\right)$$

(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.

 $CFI_{(x, v, z)}$ = 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) Motor Fuel (Unleaded) (y) =

=

Burner Fuel (z)

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

Base Fuel Index price (from Equation1).

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)

Motor Fuel (Unleaded) = (y)

(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 in the respective fuel price compared to the Change_(x,v,z) Base Fuel Index price (from Equation1).

Payment

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.

* * * * *

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

Attachment A

DOT-208 (7/06)

FUEL ADJUSTMENT AFFIDAVIT

Project Number		
County		
The Contractor is not required to no	otify the Department at the time of submitting ent program The Fuel Adjustment Affidavit s	
Does your company elect to particip price? No adjustments in fuel price:	pate in a fuel adjustment for this contract for so will be made if "No" is checked.	the fuels that do not have a fixed
	☐ Yes ☐ No	
If yes, then check the box for each f the boxes that are checked.	fuel type that has a fixed price. No adjustme	nts in fuel price will be made for
Diesel	Unleaded	Burner Fuel
If yes, provide the total dollars for ea	ach of the applicable fuels.	
Diesel (x) \$		
Unleaded (y) \$	<u></u>	
Burner Fuel (z) \$	Type of Burner Fuel Used:	
Sum $(x + y + z) = $ \$	<u></u>	
Note: The sum of the x, y, and z m	nay not exceed 15% of the original contract a	amount.
Under the penalty of law for perjury	or falsification, the undersigned,(Printed	,
OT	(Contractor)	
complete to the best of their knowle	tion is submitted in good faith, that the informedge and belief, and that the monetary amou authorized to certify the above documentation	int identified accurately reflects the
	or its authorized representative shall have to rk sheets, bid sheets, and other data pertine	
Dated Signa	ature	<u> </u>
Notarization is required only	when the Contractor elects to participate in	the fuel adjustment affidavit
Subscribed and sworn before me th	nis 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:

- 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

APPLICABLE TO STATE-FUNDED HIGHWAY PROJECTS AWARDED IN AMOUNT OF \$100,000 OR MORE Effective on Projects Let After September 30, 2005

AGENCY: SDDOT
COUNTY: Statewide
(All)

See the reverse side of this document for more details about meeting the minimum wage rate requirements.

DATE: 08/26/2005

19.84

D	ATE:	08/26/2005
<u>LABORERS</u>		
GROUP GL1		13.14
Air Tool Op., Common Laborer, Landscape Wrkr, Flagger, Pilot Car Driver, Trucks und	er	
26,000GVW, Blue-top Checker, Materials Checker GROUP GL2		15.45
Mechanic Tender (Helper), Pipe Layer (except culvert), Form Builder Tender,		13.43
Special Surface Finish Applicator, Striping		
GROUP GL3		16.85
Asphalt Plant Tender, Pile Driver Leadsman, Form Setter, Oiler/Greaser		
GROUP GL5		19.23
Form Builder, Carpenter		40.00
GROUP GL6		18.88
Concrete Finisher, Painter, Grade Checker		
POWER EQUIPMENT OPERATORS		
GROUP G01		14.59
Concrete Paving Cure Machine, Concrete Paving Joint Sealer, Conveyor, Tractor (farm	n	
type with attachments), Self Propelled Broom, Concrete Routing Machine, Paver Feed	er,	
Pugmill GROUP G02		16.16
Bull Dozer 80 HP or less, Front End Loader 1.25 CY or less, Self Propelled Roller (ex	cent	10.10
Hot Mix), Sheepsfoot/50Ton Pneumatic Roller, Pneumatic Tired Tractor or Crawler	-	
(includes Water Wagon and Power Spray units), Wagon Drill, Air Trac, Truck Type Au	ger,	
Concrete Paving Saw GROUP G03		17.70
Asphalt Distributor, Bull Dozer over 80 HP, Concrete Paving Finishing Machine, Backh	oes/	17.70
Excavators 20 tons or less, Crusher (may incl. Internal screening plant), Front End	000,	
Loader over 1.25 CY, Rough Motor Grader, Self Propelled Hot Mix Roller, Push Tracto	r,	
Euclid or Dumpster, Material Spreader GROUP G04		18.17
Asphalt Paving Machine Screed, Asphalt Paving Machine, Cranes, Derricks, Draglines	Pile	10.17
Drivers & Shovels 30 to 50 tons, Backhoes/Excavators 21 to 40 tons, Maintenance	, 1 110	
Mechanic, Scrapers		40.00
GROUP G05		19.93
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		
TRUCK DRIVERS		44.00
GROUP GT1 Tandom Truck w/a trailor or pup, or single axle truck over 26 000 GV/W with Trailor		14.20
Tandem Truck w/o trailer or pup, or single axle truck over 26,000 GVW with Trailer GROUP GT2		16.23
Semi-Tractor & Trailer, or Tandem Truck with Pup		10.23
25 Table 2 Talloy of Tallaon Track Mill ap		
FLECTRICIANO		

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

ELECTRICIANS GROUP E01

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, 2005

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, at least 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 SDDOT's minimum wage rates, the hourly cash credit value must be determined for each employee every week (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 each week, depending on the total number of hours worked each week and/or if 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. For example, assume \$16.00 is the minimum contract wage rate and during the week one employee had 35 hours that were worked on a Davis-Bacon covered contract, 20 hours were off site and \$275/month health insurance is the only bona fide employer-paid fringe. The hourly cash equivalent credit for this (example) week is \$1.15/hr (\$275x12/52=\$63.46 weekly value / 55 TOTAL hours worked). In this example, \$14.85 could be paid as the hourly cash wage and \$1.15/hr fringe credit applied toward meeting the minimum hourly rate. Overtime pay must be calculated on the full minimum rate of \$16.00, which is \$24.00 minus \$1.15/hr fringe credit = \$22.85/hr cash wage that must be paid for all contract overtime hours worked in this example. (Please see SDDOT's Payroll Instructions & Frequently Asked Questions for further details at: http://www.sddot.com/Docs/Pavroll StmtofComplianceInstructions.doc)

Using the <u>example</u> **above**: The <u>Group GO5</u> requires a minimum hourly wage of \$19.93 and the contractor may comply by paying:

- 1. \$19.93 an hour in cash wages; or
- 2. \$18.78 cash wage plus apply the \$1.15 an hour (health insurance) fringe benefit credit. In this example, overtime must be calculated at one and one half times the basic hourly rate of \$19.93 which amounts to \$29.90/hour less the \$1.15/hour fringe credit, equals \$28.75/hour cash wage that must be paid for all overtime hours worked on covered project(s) for this example.

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

The term "<u>wages</u>" 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 do not include 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.

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 34 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."

Index – Page 532 – Under Portland	Cement Concrete Pavement	– Delete	"Dowel and	Tie Bars517	7"
and replace with the following:					

\mathbf{r}	1	1 700	D	~1	\sim
1 10	WAL	ana 116	Rare	~ I	·
120	WULL	anu nc	Dais	 . , I	•

* * * * *

SUPPLEMENTAL SPECIFICATION TO STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES

MARCH 21, 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 5.10 – 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 5% 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 5% 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 9.5 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 subsidiary of Prism 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 5% per annum for the time period after the noted 120 days until final payment is made.

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 ± 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 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 120.5 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 ± 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 270.4 - Page 97 – Add the following after the first paragraph:

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 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 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 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 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", $\pm 1/8$ " (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 $(5 \text{ mm}) \pm 1/16$ inch (2 mm). The spacing between the individual tines shall meet the following: Inches (ten foot tining rake)

2-1/16, 2-5/16, 2-15/16, 1-1/4, 2-7/16, 1-1/4, 13/16, 1-5/16. 1-1/8. 2-5/16 1, 2-1/2, 2-7/8, 2-3/4, 1-1/8, 2-3/4, 2-1/8, 1-15/16, 13/16, 7/8, 2-5/8, 9/16, 1-9/16, 3-1/16, 7/8, 9/16, 2-3/8, 2-15/16, 1-5/8, 1, 1-1/4, 1-1/81-15/16, 2-3/16, 2, 2-13/16, 1, 2-11/16, 13/16, 1-7/8, 9/16, 2-5/16, 1-7/82-1/2, 1-5/16, 3-3/16, 1-3/8, 15/16, 7/8, 1-5/8, 9/16, 1-3/4, 2-7/8, 3 1-5/8, 1-5/8, 7/8. 9/16, 1-1/4, 5/8, 2-13/16, 1-5/8, 2-7/16, 13/16, 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,		60,	25,	32,		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,			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 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 ^{a,b}								
	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 ^c	2/3 turn	5/6 turn	1 turn					

^a 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.

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.

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.

- 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 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 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 – 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.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.

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 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 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 670.5 – 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 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:

At the option of the manufacturer, processing additions may be used in the manufacture of the cement, provided the addition is comprised of a naturally occurring limestone with a minimum of 85% by mass of one or more of the mineral forms of calcium carbonate. The total amount of processing additions used shall not exceed 3%, with a tolerance of +0.5%, of the weight of the Portland cement clinker.

In addition to the certification requirement specified in SD 416, when limestone is used as a processing addition, the manufacturer shall certify the amount used as a percentage of Portland cement clinker, the percentage of Calcium Carbonate, 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.

The calcium carbonate percentage, amount of limestone used, and comparative test data shall be determined in accordance with ASTM C150-04.

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 – Add the following to the end of this section:

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 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 Pavement.

Sealant material shall not weigh more than 9.35 lbs./gal.

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 1	Ledge Rock	Gravel Surfacing
					Base Course	Gravel Cushion	
SIEVE			PERCEN	NT PASSING	1		
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 980.1 A.1 – Page 485 – Delete this section and replace with the following:

foot (1') per minute.

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

	<u>WHITE</u>	<u>YELLOW</u>
<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 to the following quantitative compositional requirements when tested in accordance with ASTM D 1394 or ASTM D 4764.

Titanium Dioxide ASTM D 476 Type II Rutile 92% min. TiO_2 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
Consistency. Krebs-Stormer Shearing rate 200 r.p.m. Grams	190 to 300	190 to 300
Equivalent K.U. when tested in accordance with ASTM D 562 (See Note 2)	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 +0.3lbs / 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		

Drying Time, No Pick-Up, Minutes, 12max. 12max. max. when tested in accordance with ASTM D711, except the wet film thickness shall be 12.5 ± 0.5 mils. The applied film shall be immediately placed in a laboratory drying chamber maintaining the relative humidity of $65 \pm 3\%$, the temperature $73.5 \pm 3.5^{\circ}$ F ($23 \pm 2^{\circ}$ C), and air flow less than one

Drying Time, Dry-through, Minutes 120max. 120max. max. when tested in accordance with ASTM 1640, except the wet film thickness shall be 12.5 ± 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.

	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

Birectional Reflectance, imminum	Directional	Reflectance,	minimum.
----------------------------------	-------------	--------------	----------

85

50

when applied at a wet film thickness of 15 mils and when tested in accordance with ASTM E 1347 (Illuminate C 2°)

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°)

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)							
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

^{*} 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 19, 2005

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 driven.	
		8 HP* (HP 200)	\$190.00/each	
		10 HP* (HP 250)	\$270.00/each	
		12 HP* (HP 300)	\$330.00/each	
		14 HP* (HP 350)	\$390.00/each	
			Splice made before	

			aith an af tha mianan han
			either of the pieces has
		0.110+	been driven.
		8 HP*	\$65.00/each
		(HP 200)	фо <u>г</u> оо/
		10 HP*	\$85.00/each
		(HP 250)	# 400.00/s s s l
		12 HP*	\$100.00/each
		(HP 300)	
		14 HP*	\$120.00/each
		(HP 350)	
510.5 E	Timber,	Pile Shoes (Timber	\$50.00/each
	Prestressed, and	Pile)	
	Steel Piles	13)	
510.5.H	Timber, Prestressed,	Dile Tie	
510.5.⊓	and Steel Piles	Pile Tip	
	and Steer Files	Reinforcement	
		(Steel Pile)	
		10" (250mm) HP Tip	\$60.00/each
		Reinforced	,
		12" (300 mm) HP	\$70.00/each
		,	φ/0.00/eacm
		Tip Reinforced	
		14" (350 mm) HP	\$85.00/each
		Tip Reinforced	
		'	
601.5	Haul Roads	Granular Material	\$5.00/ton
001.5	Haul Roads	Granulai Materiai	(\$5.51/mton)
CO4 F	Haul Roads	Asphalt Concrete	\$45.00/ton
601.5	Haui Roaus	(including asphalt)	(\$49.60/mton)
601.5	Haul Roads	Cover Aggregate	\$16.00/ton
001.5	Haui Roaus	Cover Aggregate	(\$17.63/mton)
601.5	Haul Roads	Asphalt (Tack, Prime,	\$300.00/ton
0.100	Haui Roads	Flush & Surface	·
			(\$330.00/mton)
601.5	Haul Roads	Treatment) Water	\$11.50/M. Gal.
6.100	Haui Roaus	vvaler	· ·
601.5	Haul Roads	Duot Control Chloride	(\$3.04/cubic meter)
001.5	naui Koads	Dust Control Chlorides	\$0.30/lb
0045	Traffic Control	Flancian	(\$0.66/kg)
634.5	Traffic Control	Flagging	\$20.52/hour
634.5	Traffic Control	Pilot Car	\$30.20/hour
00 1.0	amo oona o	1 1101 041	\$55.20/110d1

* * * * *