

41st STREET BRIDGE REPLACEMENT

Over the Big Sioux River

in the

City of Sioux Falls, South Dakota



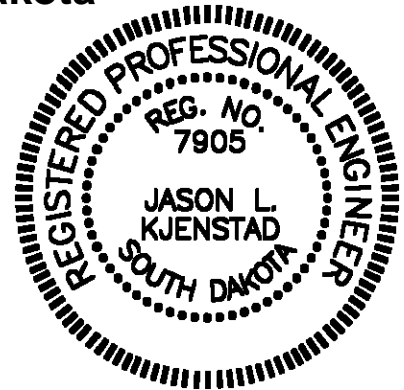
Bid Request No. 09-1105

CIP No. 422099

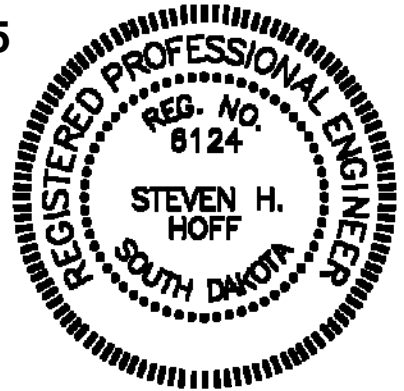
PROJECT No. 422099

**Prepared by: HDR Engineering, Inc.
6300 S. Old Village Place
Sioux Falls, SD 57108
605-977-7740**

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**2009
DBE/WBE Goal Requirements**

PUBLISH: November 6, 2009 and November 13, 2009

BID REQUEST NO. 09-1105

NOTICE TO BIDDERS

The City of Sioux Falls, SD, requests formal bids for 41st Street Bridge Replacement Project over the Big Sioux River.

Sealed bids shall be received by Budgeting/Purchasing, Third Floor, City Hall, 224 W. 9th St., P.O. Box 7402, Sioux Falls, SD 57117-7402, not later than 2 p.m., **December 1, 2009. Bids shall be publicly opened and read in City Hall, First Floor, at 2:15 p.m.**

Specifications and bid forms that must be used are available online at <http://eplans.sioxford.org>. Cite Bid Request No. **09-1105**.

The City of Sioux Falls reserves the right to reject any or all bids, waive technicalities, and make award(s) as deemed to be in the best interest of Sioux Falls, SD.

The City of Sioux Falls has adopted a Disadvantaged Business Enterprise Plan. This Plan expresses the commitment of the City of Sioux Falls that disadvantaged business enterprises have the maximum opportunity to compete for and perform federally assisted contracts and subcontracts.

Bidders on this work will be required to comply with the President's Executive Order Nos. 11246 as amended, 11518 and 11625 as amended. The requirements for bidders and contractors under these orders are explained in the specifications.

Bidders on this work will be required to comply with Title 40 CFR 33.240 and Executive Order 12138. The requirements for bidders and contractors under this regulation which concerns utilization of Disadvantaged/Minority Business Enterprises (DBE/MBE) and Women's Business Enterprises (WBE) are explained in the specifications. The DBE/MBE and WBE goals for participation in this contract in terms of percentage of contract value are as follows: DBE **3.0** percent; WBE **1.0** percent.

Davis Bacon and Related Acts wages apply to this project. All provisions relative to those acts must be met.

Your special attention is invited to the attached **Bidders Activity Report (BAR), Forms A and B, and Debar-2 form. The BAR form must be completed and submitted with your bid proposal, along with either Form A or Form B, and Debar-2 form. Failure to submit the Form BAR, appropriate form A or B, and Debar-2 form will cause the bid to be rejected.** Completion of the Bidders Activity Report is necessary in order to fulfill the requirements of obtaining a complete list of contractors contacted with regard to this project, in accordance with 49 CFR 26.11c. Statistical information used from the Bidders Activity Report will be used in the calculation of the next year's DBE goals. By completing Form A, you are advising the City how the contract goal will be met. In the event you believe you will be unable to meet the goals, the attached Form B must be completed and submitted with the Bid Proposal. Please

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be advised that good-faith efforts will be subjected to close scrutiny and if the good-faith effort submission is unacceptable, your bid will be rejected.

The City of Sioux Falls has available the latest Disadvantaged Business Enterprise directory in the Community Development Office to facilitate identifying those certified disadvantaged business enterprises within the state of South Dakota.

A Pre-bid Conference will be held on **November 19, 2009** at **9:00 a.m. (Central)** at the **Morningside Community Center (2400 S. Bahnson Avenue, Sioux Falls, SD 57103)**.

**Construction
Instructions to Bidders**

1. **Completing the Bid Form:** All bids must be made on the bid forms provided by the City, except the bidder may attach a substitute computer-printed proposal form as provided in Section 2.4 of the General Conditions for Public Improvements. Information shall be typed or printed in ink. The preparer must initial erasures and/or corrections. Each bid must be signed in ink by the bidder or authorized officer.
2. **Use of Standard Specifications:** The City of Sioux Falls current editions of the General Conditions for Public Improvements and the Supplemental Standard Specifications are hereby made a part of these specifications in their entirety unless otherwise revised, deleted, or supplemented herein. These documents are available for download at www.siouxfalls.org/PublicWorks/engineering.

Division II—Construction Details and Division III—Materials Details of the current edition of the South Dakota Department of Transportation Standard Specifications for Roads and Bridges and the current version of the South Dakota Department of Transportation Supplemental Specifications and Errata related to Division II and Division III are hereby made a part of these specifications in their entirety unless otherwise revised, deleted, or supplemented herein. These documents are available for download at www.sddot.com.

3. **Price Discrepancies:** Any discrepancies between the bid unit price and extension shall be resolved in favor of the unit price. Incorrect extensions or totals will be corrected, and the corrected figures will be used in determining the low bidder.
4. **Firm Prices:** Unit prices awarded shall remain firm for the entire contract period.
5. **Quantities:** The quantity indicated for each item in the specifications is estimated only, and the City reserves the right to order less or more as dictated by actual needs.
6. **Excise Tax:**
 - This project is a **Non-Qualifying Utility Project**—Realty Improvement Contractor's Excise Tax applicable for this project is at the rate of 2 percent contractor's excise tax. Contractors shall include the applicable tax in their bid price for each item of work.
 - This project is a **Qualifying Utility Project**—Realty Improvement Contractor's Excise Tax applicable for this project is at the rate of 2 percent for a qualifying utility under SDCL 10-46B. Contractors and Subcontractors shall both include the applicable tax in their bid price for each item of work.
7. **Federal Tax ID Number:** Each bidder shall state its Federal Tax Identification Number on the line provided on the bid form.
8. **Bid Guaranty:** Each bid of \$25,000 or greater must be accompanied by a bid bond in the amount of 10 percent of the amount of the bid, or in lieu thereof a certified check, cashier's check, or bank draft in the amount of 5 percent of the amount of the bid. All bid guaranties shall be made payable to the City of Sioux Falls. Bonds shall be issued by a surety authorized to do business in this state. Checks shall be certified or issued by a State or

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National Bank. **Bid guaranties other than those mentioned will not be accepted by the City of Sioux Falls.** Bid guaranties of unsuccessful bidders shall be returned within 45 calendar days of the bid opening. Bid guaranty of the successful bidder shall be retained until the contract is executed and a performance guaranty (if applicable) has been submitted. If a successful bidder fails to enter into contract, the bid guaranty shall be forfeited to the City to compensate for administrative expenses of making a re-award or issuing a new request.

- 9. **No Bid Guaranty Required on Small Contracts:** No bid guaranty is required if the total bid price, including any alternates, is less than \$25,000.
- 10. **Addenda:** The bidder shall acknowledge receipt of all addenda in the space provided in the bid proposal.
- 11. **Delivery of Proposals:** Each proposal shall be submitted in a sealed envelope with **Bid Proposal** and the Bid Request Number and “Due” date clearly printed on the front. When sent by mail, the sealed proposal shall be addressed as follows:

Bid Request No. 09-1105 Due **December 1, 2009**
Budgeting/Purchasing
Purchasing Division
Third Floor, City Hall
224 West Ninth Street
P.O. Box 7402
Sioux Falls, SD 57117-7402
Bid Documents Enclosed

Proposals shall be filed prior to the time and at the place specified by the Notice to Bidders. Proposals received after the time for opening of bids will be returned to the bidder unopened.

All sealed bids must be received by Purchasing, Third Floor, City Hall, 224 West Ninth Street, P.O. Box 7402, Sioux Falls, SD 57117-7402, no later than 2 p.m. on the date of opening. Bids received after 2 p.m., at a location other than Budgeting/Purchasing, will not be accepted. Bids will be publicly opened and read in the City Hall, First Floor, at **2:15 p.m.** Receipts will be issued for hand-delivered bids. Bids delivered by Federal Express, U.S. Mail, etc., will be receipted as they arrive in Budgeting/Purchasing.

Bidders on this work will be required to comply with the President’s Executive Order Nos. 11246 as amended, 11518 and 11625 as amended. The requirements for bidders and contractors under these orders are explained in the specifications.

Bidders on this work will be required to comply with Title 40 CFR 33.240 and Executive Order 12138. The requirements for bidders and contractors under this regulation which concerns utilization of Disadvantaged/Minority Business Enterprises (DBE/MBE) and Women’s Business Enterprises (WBE) are explained in the specifications. The DBE/MBE and WBE goals for participation in this contract in terms of percentage of contract value are as follows: MBE 4.0 percent; WBE 1.0 percent.

Davis Bacon and Related Acts wages apply to this project. All provisions relative to those acts must be met.

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12. **Withdrawal of Bids:** A bid may be withdrawn by the bidder by letter, telegram, facsimile, or in person before the time set for the opening of bids. No bid shall be withdrawn for a period of 45 (forty-five) days after the bid opening.
13. **Local Preference:** By virtue of statutory authority, preference will be given materials, products, and supplies found or produced within the state of South Dakota. Bidders resident in South Dakota shall be allowed a preference over the bid of any bidder from any other state enforcing or having a preference for resident bidders, equal to such preference.
14. **Bid Results:** Results of bid openings will be available at the Public Works Administration Office and on the City's website at siouxfalls.org under Business "NTB Tabulations of Bids Received" following tabulation of the bids. After an award has been made and signed by the Mayor, all bid proposals and related information will be on file in the Public Works Administration Office for public review. Public Works Administration will do all formal and informal notifications of bid awards.
15. **Method of Award:** This request will be evaluated and a contract award made to the lowest combined (A + B) bid from a responsive and responsible bidder deemed to be in the best interest of the Owner.

Alternates, if applicable, are prioritized and will be awarded in order as allowed by project budget. If Alternates are utilized, contract award will be made on lowest combined bid from a responsive and responsible bidder deemed to be in the best interest of the Owner.

16. **Contract:** The successful bidder(s) will be required to enter into contract by signature on separate contract documents which will be prepared by the City from information in this bid request and the successful bidder's response thereto.
17. **Performance and Payment Bond:** Performance and Payment bonds are required for all construction contracts totaling \$25,000 or more.
18. **Interest:** Interest for late payments and retainages to the contractor as required by law will be paid at the annual rate of 6 percent.
19. **Right to Protest:** Any actual or prospective bidder, officer, or contractor who is aggrieved in connection with the solicitation or award of a contract may protest. The protesting bidder shall file a written statement with the Purchasing Office within seven calendar days of the date the Mayor signed the bid award document.
20. **Questions:** Questions pertaining to this bid request shall be directed to:

**HDR Engineering, Inc.
6300 South Old Village Place, Suite 100
Sioux Falls, SD 57108
605-977-7740**

If the City deems it of general interest, the answer shall be issued in written addendum to each vendor that has been sent a bid request.

21. **Insurance:** The Contractor entering into any contract for services shall secure the insurance specified below and shall cause all its consultants/subcontractors to do likewise. All insurance shall be issued by an insurance company(s) acceptable to the City. The insurance specified in

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this policy directive may be in a policy or policies of insurance, primary or excess. Certificates of all required insurance shall be provided to the City upon execution of any agreement. Exceptions to this policy must be approved by the City Attorney's Office and Risk Management. **The First National Bank in Sioux Falls must be listed as an additional insured on the contractor's insurance form.**

- a. Workers' compensation. The policy shall provide the statutory limits required by South Dakota law. In addition, it shall provide Coverage B, Employer's Liability coverage of not less than \$1,000,000 each accident, \$1,000,000 disease-policy limits. The required limit may be met by excess liability (umbrella) coverage.
 - b. Commercial general liability. The policy shall provide occurrence form contractual, personal injury, bodily injury, and property damage liability coverage with limits of at least \$1,000,000 per occurrence, \$2,000,000 general aggregate, and \$2,000,000 aggregate products and completed operations. The required limit may include excess liability (umbrella) coverage. The policy shall name the City and its representatives as an additional insured. If "occurrence form" insurance is not available, "claims made" insurance will be acceptable. The policy shall be maintained for three years after completion of this contract.
 - c. Automobile liability. The policy shall cover all owned, nonowned, and hired automobiles, trucks, and trailers. The coverage shall be as broad as that found in the standard comprehensive automobile liability policy with limits of not less than \$1,000,000 combined single limit each occurrence. The required limit may include excess liability (umbrella) coverage.
 - d. The Contractor will provide the City with at least thirty days' written notice of an insurer's intent to cancel or not renew any of the insurance coverage. The Contractor agrees to hold the City harmless from any liability, including additional premium due because of the Contractor's failure to maintain the coverage limits required.
 - e. The City's acceptance of a certificate of insurance does not mean that the City assumes responsibility for its validity. Nor does it mean that the City represents that the coverage and limits required are adequate to protect the Contractor.
22. **Conflicting federal rules govern on subsidized projects:** The letting of any public contract in connection with funds that are granted or advanced by the United States of America shall be subject to the effect, if any, of related laws of said United States and valid rules and regulations of federal agencies in charge, or governing use and payment of such federal funds. Bid awards when federal funds are involved must be made to the lowest responsive and responsible bidder without regard to state preferential bid provisions.
23. **Brand Name or Equal:** Whenever an article or material is defined by describing a proprietary product or by using the name of a manufacturer, the term "or equal" if not inserted shall be implied. The specified article or material shall be understood as indicating the type, function, minimum standard of design, efficiency, and quality desired and shall not be construed as to exclude other manufactured products of comparable quality, design, and efficiency.

The evaluation of bids and determination as to equality of the products shall be the responsibility of the City and will be based on information furnished by the bidder or identified in their bid, as well as other information reasonably available to the City.

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24. **Builders Exchanges:** The contract documents are on file at the Sioux Falls Builders Exchange, Sioux Falls, SD, and the Plains Builders Exchange, Sioux Falls, SD.
25. **Payments:** All pay requests for this project will be processed **ONCE** monthly. There will be **NO EXCEPTIONS**. Please refer to the **Pay Request Schedule** for exact processing and payment dates.

Supplementary Conditions

Revised: February 13, 2009

1. Introduction

The following supplements modify, change, delete from, or add to the current edition of the "City of Sioux Falls General Conditions for Public Improvements."

2. Section 7. Legal Specifications and Responsibility to the Public

Add the following section:

- 7.26 Audit—The Contractor shall allow the City or its representatives access to inspect, audit, and/or reproduce, or all three, any books, documents, papers, and records (in whatever form they may be kept, whether written, electronic, or other) or interview any of the Contractor's employees, all subcontractors and all suppliers, and their respective employees involving transactions related to the contract for two years after final payment.

PROPOSAL FORM

PROJECT: 41st Street Bridge Replacement BID REQUEST NO. 09-1105

C.I.P. NO. 422099

DATE: December 1, 2009

The undersigned being familiar with all the details, conditions, and requirements hereby proposes to furnish all labor, tools, materials, and equipment necessary to fully complete the work for the City of Sioux Falls, South Dakota, as advertised in accordance with the specifications therefore furnished by the City for the following price(s):

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Item No.	Std. Bid Item	Item Description	Unit	Approx. Qty	Unit Bid Price	Amount Bid
GRADING						
1	9.0010	Mobilization	LS	1.0		
2	9.1310	Critical Path Method Schedule	LS	1.0		
3	100.0020	Clear and Grub Tree	Each	10.0		
4	110.0300	Remove Concrete Curb and Gutter	Ft	397.0		
5	110.0600	Remove Fence	Ft	193.0		
6	110.1010	Remove Asphalt Concrete Pavement	SqYd	2096.9		
7	110.1100	Remove Concrete Pavement	SqYd	6084.6		
8	110.1140	Remove Concrete Sidewalk	SqYd	619.1		
9	110.8100	Saw Existing Asphalt	Ft	911.0		
10	110.8110	Saw Existing PCC Concrete	Ft	471.0		
11	120.0010	Unclassified Excavation	CuYd	2739.0		
12	120.0150	Unclassified Excavation, Grade Stabilization	CuYd	632.0		
13	120.0480	Scarify and Recompact Subgrade	SqYd	5660.0		
14	120.0600	Contractor Furnished Borrow	CuYd	4756.0		
15	120.6000	Water For Dust Control	MGal	200.0		
16	120.6100	Water For Embankment	MGal	18.1		
17	620.0540	Temporary Fence	Ft	1019.0		
18	831.0050	Geotextile Fabric For Subgrade Stabilization	SqYd	2830.0		
SURFACING						
19	120.6200	Water For Granular Material	MGal	42.4		
20	120.7000	Select Granular Backfill	Ton	276.7		
21	260.1010	Base Course	Ton	3529.3		
22	320.1200	Asphalt Concrete Composite	Ton	606.6		
23	380.0090	10" Nonreinforced PCC Pavement	SqYd	4940.8		
24	380.1070	10" Miscellaneous PCC Pavement	SqYd	53.1		
25	380.4010	6" PCC Fillet Section	SqYd	18.6		
26	380.4090	10" PCC Fillet Section	SqYd	13.0		
27	380.5030	Nonreinforced PCC Pavement Repair - 10" Depth	SqYd	68.3		
28	380.6110	Insert Steel Bar in PCC Pavement	Each	387.0		
29	420.0300	Structure Excavation, Retaining Wall	CuYd	544.8		
30	460.0100	Class A45 Concrete, Miscellaneous	CuYd	96.5		
31	460.0380	Install Dowel in Concrete	Each	2820.0		
32	480.0100	Reinforcing Steel	Lb	8845.0		
33	530.0410	MSE Segmental Block Wall	SqFt	648.0		
34	650.7000	Concrete Curb & Gutter Type SF66	Ft	296.0		
35	650.7080	Concrete Curb & Gutter Type SF610	Ft	1018.0		
36	650.8000	Concrete Valley Gutter 6" Thick	SqYd	188.7		
37	651.0060	6" Concrete Sidewalk	SqFt	10570.4		
38	651.6010	Detectable Warning Surface	SqFt	16.0		
39	680.0040	4" Underdrain Pipe	Ft	390.0		
40	Special	6" Colored and Patterned Median PCC Pavement	SqFt	983.0		
41	Special	Footing Undercut	CuYd	39.8		
42	Special	Steel Pedestrian Rail	Ft	240.5		
43	Special	Steel Bicycle Rail	Ft	672.0		

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Item No.	Std. Bid Item	Item Description	Unit	Approx. Qty	Unit Bid Price	Amount Bid
TRAFFIC CONTROL						
44	634.0100	Traffic Control	Unit	8060.0		
45	634.0120	Traffic Control, Miscellaneous	LS	1.0		
46	634.0380	Tubular Marker	Each	180.0		
47	634.0420	Type C Advance Warning Arrow Panel	Each	5.0		
48	634.0610	4" Temporary Pavement Marking Tape Type 2	Ft	21100.0		
49	634.1215	Contractor Furnished Portable Changeable Message Sign	Each	4.0		
50	Special	Traffic Control Movable Concrete Barrier	Ft	4828.0		
51	Special	Reflectorized Tabs	Each	300.0		
52	Special	Temporary Business Signs	Each	60.0		
53	Special	11'X11' Special Sign	Each	2.0		
54	Special	7'X7' Special Sign	Each	2.0		
55	Special	5'x4' Special Sign	Each	10.0		
EROSION CONTROL						
56	110.1700	Remove Silt Fence	Ft	1590.0		
57	120.6300	Water For Vegetation	MGal	1291.0		
58	230.0010	Placing Topsoil	CuYd	764.2		
59	230.0020	Placing Contractor Furnished Topsoil	CuYd	157.9		
60	230.0300	Salvage Topsoil	CuYd	545.9		
61	700.0210	Class B Riprap	Ton	1060.0		
62	730.0251	Special Permanent Seed Mixture 1	Lb	956.9		
63	731.0100	Fertilizing	Lb	319.0		
64	732.0200	Fiber Mulching	Ton	3.2		
65	733.0100	Sodding	SqYd	697.0		
66	734.0105	Erosion Control Blanket	SqYd	816.0		
67	734.0154	12" Diameter Erosion Control Wattle	Ft	500.0		
68	734.0601	Silt Fence	Ft	1590.0		
69	734.0610	Mucking Silt Fence	CuYd	235.6		
70	734.0620	Repair Silt Fence	Ft	318.0		
71	734.0630	Floating Silt Curtain	Ft	755.0		
72	734.0850	Inlet Protection	Each	15.0		
73	734.5010	Sw eeping	Hour	400.0		
74	734.6001	Temporary Vehicle Tracking Control	Each	4.0		
75	734.6011	Temporary Stream Crossing	Each	2.0		
76	735.2230	3" Caliper Deciduous Tree, Furnish and Plant	Each	3.0		
77	831.0110	Type B Drainage Fabric	SqYd	2322.4		
78	999.5147	Articulated Concrete Mattress	SqYd	1562.6		
79	999.5157	4" Depth Shredded Bark Mulch	SqYd	12.0		

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Item No.	Std. Bid Item	Item Description	Unit	Approx. Qty	Unit Bid Price	Amount Bid
STORM SEWER						
80	110.0400	Remove Drop Inlet	Each	5.0		
81	110.0425	Remove Junction Box	Each	1.0		
82	110.0530	Remove Storm Sewer Pipe	Ft	440.0		
83	450.0113	15" RCP Class 3, Furnish	Ft	20.0		
84	450.0120	15" RCP, Install	Ft	20.0		
85	450.0123	18" RCP Class 3, Furnish	Ft	220.0		
86	450.0130	18" RCP, Install	Ft	220.0		
87	450.0183	36" RCP Class 3, Furnish	Ft	130.0		
88	450.0190	36" RCP, Install	Ft	130.0		
89	450.0404	15" RCP Bend, Furnish	Each	1.0		
90	450.0405	15" RCP Bend, Install	Each	1.0		
91	450.0408	18" RCP Bend, Furnish	Each	2.0		
92	450.0409	18" RCP Bend, Install	Each	2.0		
93	450.0428	36" RCP Bend, Furnish	Each	1.0		
94	450.0429	36" RCP Bend, Install	Each	1.0		
95	462.0100	Class M6 Concrete	CuYd	19.5		
96	480.0100	Reinforcing Steel	Lb	2121.0		
97	670.5200	Special Frame and Grate Assembly	Each	3.0		
98	671.6100	Type Y Manhole Frame and Lid	Each	3.0		
99	950.5000	Adjust Manhole (Storm)	Each	3.0		
100	950.5410	Manhole Construction Plate Marker	Each	2.0		
101	Special	Type D Frame and Grate Assembly	Each	1.0		
102	Special	6" PVC Pipe	Ft	38.0		
103	Special	Special Curb Inlet - 10'x4.5'	Each	1.0		

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Item No.	Std. Bid Item	Item Description	Unit	Approx. Qty	Unit Bid Price	Amount Bid
WATERMAIN						
104	110.1462	Remove Water Manhole	Each	9.0		
105	110.1910	Remove Fire Hydrant	Each	2.0		
106	110.1970	Remove Water Main	Ft	863.0		
107	260.7010	Trench Stabilization Material	Ton	50.0		
108	900.0102	8" Ductile Iron Watermain	Ft	75.0		
109	900.0104	12" Ductile Iron Watermain	Ft	6.0		
110	900.0105	16" Ductile Iron Watermain	Ft	697.0		
111	900.0201	6" C900 DR 18 PVC Watermain	Ft	13.0		
112	900.0400	Valve Box	Each	2.0		
113	900.0402	6" MJ Gate Valve with Box	Each	2.0		
114	900.0403	8" MJ Gate Valve with Box	Each	1.0		
115	900.0406	16" MJ Butterfly Valve with Box	Each	2.0		
116	900.0450	Valve Box Adjustment	Each	9.0		
117	900.0451	Valve Box Extension	Each	2.0		
118	900.0505	16" MJ Elbow (45 Degree)	Each	3.0		
119	900.0718	16" x 8" MJ Tee	Each	1.0		
120	900.0719	16" x 6" MJ Tee	Each	1.0		
121	900.0802	8" x 6" MJ Reducer	Each	1.0		
122	900.0813	16" x 12" MJ Reducer	Each	2.0		
123	900.1004	12" MJ Plug	Each	2.0		
124	900.1102	8" MJ Cap	Each	1.0		
125	900.1105	16" MJ Cap	Each	2.0		
126	900.1202	8" MJ Long Sleeve	Each	1.0		
127	900.1204	12" MJ Long Sleeve	Each	2.0		
128	900.1205	16" MJ Long Sleeve	Each	2.0		
129	900.1502	Fire Hydrant	Each	1.0		
130	900.1507	Temporary Fire Hydrant	Each	1.0		
131	900.1750	Connect To Existing Watermain	Each	2.0		
132	900.1751	Cut and Tie To Existing Watermain	Each	3.0		
133	900.6004	Excavate and Backfill for City furnished Smith Tap and Box	Each	1.0		
134	900.8001	6" Watermain Bedding Material	Ft	13.0		
135	900.8002	8" Watermain Bedding Material	Ft	75.0		
136	900.8004	12" Watermain Bedding Material	Ft	6.0		
137	900.8005	16" Watermain Bedding Material	Ft	697.0		
138	950.5200	Trench Dewatering	LS	1.0		
139	Special	Remove Abandoned Pump Station	LS	1.0		
140	Special	Non Standard 8' Fire Hydrant	Each	1.0		
141	Special	3' Valve Nut Extension	Each	1.0		
142	Special	5' Fire Hydrant Extension	Each	1.0		
143	Special	6" Restrainer Device	Each	6.0		
144	Special	8" Restrainer Device	Each	7.0		
145	Special	12" Restrainer Device	Each	6.0		
146	Special	16" Restrainer Device	Each	20.0		

**2009
DBE/WBE Goal Requirements**

Item No.	Std. Bid Item	Item Description	Unit	Approx. Qty	Unit Bid Price	Amount Bid
SANITARY SEWER						
147	110.0465	Abandon Sanitary Sewer Manhole	Each	1.0		
148	110.0525	Abandon Sanitary Sewer Pipe	Ft	254.0		
149	110.1461	Remove Sanitary Sewer Manhole	Each	2.0		
150	260.7010	Trench Stabilization Material	Ton	50.0		
151	831.0200	Woven Geotextile Separator	SqYd	120.0		
152	950.1111	36" Sanitary Sewer Pipe 26' to 28' Deep	Ft	234.0		
153	950.2010	36" Sanitary Sewer Pipe Bedding Material	Ft	234.0		
154	950.3312	36" Sewer Bends	Each	1.0		
155	950.4311	72" Lined Manhole 26'-28' Deep	Each	2.0		
156	950.4808	24" Boots For Manhole	Each	2.0		
157	950.4812	36" Boots For Manhole	Each	5.0		
158	950.5000	Adjust Manhole (Sanitary)	Each	4.0		
159	950.5010	Reconstruct Manhole	Each	3.0		
160	950.5200	Trench Dewatering	LS	1.0		
161	950.5250	Sanitary Sewer Temporary Bypass	LS	1.0		
162	950.5300	Manhole Frame and Cover - (R1713 or R1772)	Each	3.0		
163	950.5310	Manhole Frame with Bolt Down Cover Plate - R1712	Each	4.0		
164	950.5320	Manhole External Frame Seal	Each	7.0		
165	950.5401	Manhole Marker-Type 1	Each	3.0		
166	950.5410	Manhole Construction Plate Marker	Each	7.0		
167	950.5600	Manhole Exfiltration/Vacuum Test	Each	3.0		
168	950.5610	Sanitary Sewer Exfiltration Testing	Ft	234.0		
169	950.5700	Locating Utility	Each	8.0		
170	950.5710	Verify Utility	Each	8.0		
171	Special	84" Lined Manhole 30'-32' Deep	Each	1.0		
172	Special	C.I.P.P. Line 36" Pipe	Ft	285.0		
173	Special	Concrete Pipe Collar	Each	2.0		

**2009
DBE/WBE Goal Requirements**

Item No.	Std. Bid Item	Item Description	Unit	Approx. Qty	Unit Bid Price	Amount Bid
PERMANENT SIGNING						
174	110.5021	Salvage Traffic Sign for Reset	Each	5.0		
175	632.1320	2.0"x2.0" Perforated Tube Post	Ft	39.0		
176	632.3050	Furnish Sheet Aluminum Sign with Reflective Sheeting	SqFt	18.5		
177	632.3060	Install Traffic Sign on Post	Each	6.0		
178	632.3065	Install Traffic Sign on Street Light	Each	4.0		
PAVEMENT MARKINGS						
179	110.1400	Remove Pavement Marking, 4" or Equivalent	Ft	1370.0		
180	110.1410	Remove Pavement Marking, Arrow	Each	4.0		
181	633.0010	Cold Applied Plastic Pavement Marking, 4"	Ft	3244.0		
182	633.0040	Cold Applied Plastic Pavement Marking, Arrow	Each	8.0		
183	633.1100	Epoxy Pavement Marking Paint, 4" White	Ft	320.0		
184	633.1105	Epoxy Pavement Marking Paint, 4" Yellow	Ft	860.0		
185	633.1400	Pavement Marking Paint, 4" White	Ft	278.0		
186	633.1405	Pavement Marking Paint, 4" Yellow	Ft	71.0		
187	633.1445	Pavement Marking Paint, Arrow	Each	5.0		
188	633.5000	Groove Pavement For Pavement Marking, 4"	Ft	3244.0		
LIGHTING						
189	9.0551	Tax on City Furnished Roadway Lighting Materials	LS	1.0	\$ 572.00	\$ 572.00
190	110.0425	Remove Junction Box (Lighting or Traffic)	Each	9.0		
191	110.1540	Remove Luminaire Pole Footing	Each	7.0		
192	110.5100	Salvage Luminaire Pole	Each	7.0		
193	250.0015	Incidental Work, Lighting	LS	1.0		
194	635.0433	Install Breakaway Base Luminaire Pole with Arm-50' Height	Each	7.0		
195	635.5020	2' Diameter Footing (Street Lights)	Ft	63.0		
196	635.5318	18" Diameter Junction Box (Street Lights)	Each	6.0		
197	635.5324	24" Diameter Junction Box (Traffic)	Each	7.0		
198	635.5491	Tie To Existing Conduit	Each	4.0		
199	635.5530	Preformed Detector Loop	Each	12.0		
200	635.5547	Traffic Counter Surface Utility Box	Each	2.0		
201	635.8015	1.5" Rigid Galvanized Steel Conduit	Ft	380.0		
202	635.8020	2" Rigid Galvanized Steel Conduit	Ft	14.0		
203	635.8120	2" Rigid Conduit, Schedule 40	Ft	936.0		
204	635.8220	2" Rigid Conduit, Schedule 80	Ft	190.0		
205	635.8330	2" Innerduct, SDR 13.5	Ft	936.0		
206	635.9635	Install Street Light Wire	Ft	1592.0		
207	Special	Temporary Lighting System	LS	1.0		
208	Special	Pedestrian Under Bridge Lighting	LS	1.0		

**2009
DBE/WBE Goal Requirements**

Item No.	Std. Bid Item	Item Description	Unit	Approx. Qty	Unit Bid Price	Amount Bid
BRIDGE						
209	250.0030	Incidental Work, Structure	LS	1.0		
210	420.0100	Structure Excavation, Bridge	CuYd	827		
211	460.0030	Class A45 Concrete, Bridge Deck	CuYd	916.9		
212	460.0050	Class A45 Concrete, Bridge	CuYd	670.1		
213	460.0150	Concrete Approach Slab for Bridge	SqYd	427.3		
214	460.0160	Concrete Approach Sleeper Slab for Bridge	SqYd	149.9		
215	480.0100	Reinforcing Steel	Lb	41100		
216	480.0200	Epoxy Coated Reinforcing Steel	Lb	123580		
217	Special	Bridge Elevation Survey	LS	1.0		
218	Special	Strip Seal Expansion Joint	Ft	186.2		
219	Special	Compression Seal Joint	Ft	186.0		
220	Special	Bridge End Backfill	CuYd	235		
221	Special	Bridge End Backfill Underdrain Pipe	Ft	288		
222	Special	Bridge End Backfill Excavation	CuYd	1351		
223	Special	5'-0" Prestressed Concrete Box Girder	Ft	1804.0		
224	Special	6'-0" Prestressed Concrete Box Girder	Ft	3908.6		
225	Special	Steel Bicycle Railing on Sidewalk	Ft	656.0		
226	Special	Steel Bicycle Railing on Concrete Barrier	Ft	609.7		
227	Special	No. 4 Rebar Splice	Each	30		
228	Special	No. 5 Rebar Splice	Each	410		
229	Special	No. 6 Rebar Splice	Each	62		
230	Special	No. 7 Rebar Splice	Each	246		
231	Special	Prebore Pile	Ft	440		
232	Special	HP12 Pile Tip Reinforcement	Ft	44		
233	Special	HP12x74 Steel Test Pile, Furnish & Drive	Ft	171		
234	Special	HP12x74 Steel Bearing Pile, Furnish & Drive	Ft	3381		
235	Special	HP14 Pile Tip Reinforcement	Ft	74.0		
236	Special	HP14x89 Steel Test Pile, Furnish & Drive	Ft	170.0		
237	Special	HP14x89 Steel Bearing Pile, Furnish & Drive	Ft	5766.0		
Total Gross Base Bid						
Item No.	Std. Bid Item	Item Description	Unit	Approx. Qty	Unit Bid Price	Amount Bid
CONTRACT DAYS						
211	Special	Contract Days	Days		\$ 10,000	
Total Gross Base Bid (B)						
Total Basis for Comparison of Bids (A+B)						

2009

DBE/WBE Goal Requirements

ADDITIONAL CONDITION: The award period of this project will be extended to 45 days to allow all parties involved necessary review and approval time. Any party submitting a bid on this contract agrees that the statutory time for return of unsuccessful bid guaranties shall be extended from 30 to 45 days and that the City shall have 45 days within which to make the award to the successful bidder. The parties agree that any cost associated with this additional condition is reflected in the bid document.

Contractor shall complete the proposal form in accordance with the Special Provision for "Consideration of Proposal (A+B Method)".

If there is a discrepancy between unit bid prices and extensions, the unit bid price shall govern. This request will be evaluated and a contract award made to the lowest bid from a responsive and responsible bidder deemed to be in the best interest of the Owner.

Alternates, if applicable, are prioritized and will be awarded in order as allowed by project budget. If Alternates are utilized, contract award will be made on lowest combined bid from a responsive and responsible bidder deemed to be in the best interest of the Owner.

It is understood and agreed that the quantities of material to be furnished and work to be done may be varied on construction as may be deemed advisable by the City of Sioux Falls. It is further understood and agreed that the City of Sioux Falls may, at its option, delete items from the contract.

**2009
DBE/WBE Goal Requirements**

The bid includes all local, state, and federal taxes that would affect the amount of the bid.

The bidder will commence field work under this contract no later than March 29, 2010. The bidder must fully complete the project **in accordance with the Special Provision for Consideration of Proposals (A+B Method)**. Bidder further agrees to pay as disincentive the amount specified in the Special Provision for Consideration of Proposals (A+B Method) for each working day thereafter the days bid that the roadway is not open to seven (7) lanes. Work shall include all phases required to open seven lanes of traffic. Completed work includes the bridge, barrier, sanitary sewer, storm sewer, paving, signing, lighting, striping, turf establishment and final surfaces as approved by the Engineer, and all other work required for the safe movement of seven (7) lanes of traffic. Additional critical dates associated with this project are as follows:

- All Work associated with impacts to the parking capacity of the Olive Garden parking lot including, but not limited to the removal and placement of gravel cushion, curb & gutter, and asphalt surfacing (Station 26+00-R to 27+00-R) shall take no more than **10 working days**. Bidder further agrees to pay as liquidated damages in the amount of \$500 per day for each working day thereafter that the work remains uncompleted.

The undersigned acknowledges receipt of the following addenda to the plans and/or specifications (give number and date of each):

ADDENDUM NO. _____

DATED: _____

The undersigned submits herewith the bid security required by the Contract Documents.

**2009
DBE/WBE Goal Requirements**

It is understood that the right is reserved by the City of Sioux Falls to reject any or all bids, and it is agreed that this bid may not be withdrawn during the period of days provided in the Contract Documents.

A computer prepared and printed proposal form is attached to this proposal form. Yes No

Completed Bidder's Activity Report, along with either Form A or B and Debar-2 form are attached to this proposal form. Yes No

Contractor has reviewed Pay Request Schedule. Yes No

Contractor attended Pre-Bid Conference. Yes No

Respectfully submitted,

By _____

Federal Tax I.D. No. _____
(DO NOT OMIT)

Fuel Tax License No. _____
(Contracts including highway or street work only)

Highway Contractor's License No. _____
(Contracts including highway or street work only)

Excise Tax No. _____

Sales Tax No. _____

OFFICIAL ADDRESS AND PHONE NUMBER:

Address

City/State/ZIP

Phone Number

FAX

Email Contact

BIDDER'S ACTIVITY REPORT

Print on Blue Paper

In accordance with 49 CFR Part 26.11(c), a bidder's list must be created and maintained of ALL firms bidding on prime contracts and bidding or quoting subcontracts; therefore, the following information is required.

THIS FORM TO BE COMPLETED AND RETURNED WITH BID SUBMITTAL BY ALL BIDDING ENTITIES.

Prime Contractor: _____

Project Owner: _____

Address: _____

Address: _____

City, State, Zip: _____

City, State, Zip: _____

Prime's Racial/Ethnic Code: _____

Project Name: _____

Is Prime a Certified DBE?: _____

Project Address: _____

(Use codes below to complete first column.)

City, State, Zip: _____

LIST ALL SUBCONTRACTORS, VENDERS, AND/OR SUPPLIERS CONTACTED FOR QUOTES PERTAINING TO THIS BID

Racial / Ethnic Code	Company Name	Contact Person	Address	City	State	Zip Code	Phone Number

If any of the above firms are "Certified Disadvantaged Business Enterprises," please designate by placing an "X" in the first column next to the appropriate code used below.

Racial/Ethnic Code
1. White American
2. Black American
3. Native American
4. Hispanic American
5. Asian/Pacific American
6. Women Business Enterprise
7. Other

COMPLETED BY: _____

DATE: _____

Project No. _____

FORM A

City of Sioux Falls, SD
Schedule of DBE Participation

Print on Blue Paper

Form A or Form B shall be completed and submitted with the bid proposal. Failure to do so will cause the bid to be rejected.

Total Bid Amount = \$ _____

Name and Address of Subcontractor	Type of Work and Contract Items or Parts Thereof to be Performed	Dollar Amount of Subcontracted Work	DBE Percentage
TOTAL			

The undersigned intends to enter into a formal agreement with the DBE Contractors listed in this schedule conditioned upon notification of apparent low bid. Form A-1 must be completed for **each** subcontractor/vendor/supplier listed above and shall be given to the Project Owner for submittal to the Contract Compliance Specialist of the City of Sioux Falls **within 7 days** of the bid award date.

Authorized Signature _____

Date _____

Title _____

Firm Name _____

Project No.: _____ Project Address: _____

City of Sioux Falls, SD

Print on Blue Paper

DBE Good Faith Efforts Compliance Summary

This form shall be completed and submitted with the bid proposal if the DBE goal cannot be met.

Name and Address of Certified Disadvantaged Business Enterprise	Dates of Contact	Method of Contact	Documents Attached	Reason DBE was not used
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				

Failure to accomplish and document good faith efforts may be cause for disqualification of this bid.

Bidder MUST attach documentation regarding the good faith efforts put forth.

Documents may include copies of letters sent, advertisements used, unacceptable bid responses, etc.

Good faith efforts must show that the efforts could reasonably be expected to produce a level of DBE participation sufficient to meet the DBE goal of this project.

Authorized Signature: _____ Date: _____

Title: _____ Firm Name: _____

Project Number

United States Environmental Protection Agency
Washington, DC 20460

**Certification Regarding
Debarment, Suspension, and Other Responsibility Matters**

The prospective participant certifies to the best of its knowledge and belief that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

Typed Name & Title of Authorized Representative

Signature of Authorized Representative

Date

I am unable to certify to the above statements. My explanation is attached.



Environmental
Protection Agency

OMB Control No: _____
Approved: _____
Approval Expires: _____

**Disadvantaged Business Enterprise Program
DBE Subcontractor Performance Form**

NAME OF SUBCONTRACTOR ¹		PROJECT NAME
ADDRESS		BID/PROPOSAL NO.
TELEPHONE NO.		E-MAIL ADDRESS
PRIME CONTRACTOR NAME		
CONTRACT ITEM NO.	ITEM OF WORK OR DESCRIPTION OF SERVICES BID TO PRIME	PRICE OF WORK SUBMITTED TO PRIME CONTRACTOR
Currently certified as an MBE or WBE under EPA's DBE Program? _____ Yes _____ No		
_____ Signature of Prime Contractor		_____ Date
_____ Print Name		_____ Title
_____ Signature of Subcontractor		_____ Date
_____ Print Name		_____ Title

¹Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.



Environmental Protection Agency

OMB Control No: 2090-0030
Approved: 05/01/2008
Approval Expires: 01/31/2011

Disadvantaged Business Enterprise Program
DBE Subcontractor Utilization Form

BID/PROPOSAL NO.	PROJECT NAME
NAME OF PRIME BIDDER/PROPOSER	E-MAIL ADDRESS
ADDRESS	
TELEPHONE NO.	FAX NO.

The following subcontractors will be used on this project:			
COMPANY NAME, ADDRESS, PHONE NUMBER, AND E-MAIL ADDRESS	TYPE OF WORK TO BE PERFORMED	ESTIMATED DOLLAR AMOUNT	CURRENTLY CERTIFIED AS AN MBE OR WBE?

I certify under penalty of perjury that the forgoing statements are true and correct. In the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302(c)

_____ Signature of Prime Contractor	_____ Date
_____ Print Name	_____ Title

'Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

EPA FORM 6100-4 (DBE Subcontractor Utilization Form)

2009 PAY REQUEST SCHEDULE

City of Sioux Falls ~ DBE/WBE Projects

January

Submit Pay Request
to the City Friday, January 2

Check is mailed from
City of Sioux Falls to
Payee Monday, January 26

February

Submit Pay Request
to the City Friday, February 6

Check is mailed from
City of Sioux Falls to
Payee Monday, February 23

March

Submit Pay Request
to the City Friday, March 6

Check is mailed from
City of Sioux Falls to
Payee Monday, March 30

April

Submit Pay Request
to the City Friday, April 3

Check is mailed from
City of Sioux Falls to
Payee Monday, April 27

May

Submit Pay Request
to the City Friday, May 1

Check is mailed from
City of Sioux Falls to
Payee Tuesday, May 26
(due to holiday)

June

Submit Pay Request
to the City Friday, June 5

Check is mailed from
City of Sioux Falls to
Payee Monday, June 29

July

Submit Pay Request
to the City Thursday, July 2
(due to holiday)

Check is mailed from
City of Sioux Falls to
Payee Monday, July 27

August

Submit Pay Request
to the City Friday, August 7

Check is mailed from
City of Sioux Falls to
Payee Monday, August 31

September

Submit Pay Request
to the City Friday, September 4

Check is mailed from
City of Sioux Falls to
Payee Monday, September 28

October

Submit Pay Request
to the City Friday, October 2

Check is mailed from
City of Sioux Falls to
Payee Monday, October 26

November

Submit Pay Request
to the City Friday, November 6

Check is mailed from
City of Sioux Falls to
Payee Monday, November 30


December


Submit Pay Request
to the City Friday, December 4

Check is mailed from
City of Sioux Falls to
Payee Monday, December 28

PAY REQUEST SCHEDULE—2009
City of Sioux Falls— DBE/WBE Projects

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4	5	6	7	8	9	10	8	9	10	11	12	13	14	8	9	10	11	12	13	14
11	12	13	14	15	16	17	15	16	17	18	19	20	21	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28	22	23	24	25	26	27	28
25	26	27	28	29	30	31								29	30	31				
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4						1	2		1	2	3	4	5	6
5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13
12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20
19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27
26	27	28	29	30			24	25	26	27	28	29	30	28	29	30				
							31													
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4							1			1	2	3	4	5
5	6	7	8	9	10	11	2	3	4	5	6	7	8	6	7	8	9	10	11	12
12	13	14	15	16	17	18	9	10	11	12	13	14	15	13	14	15	16	17	18	19
19	20	21	22	23	24	25	16	17	18	19	20	21	22	20	21	22	23	24	25	26
26	27	28	29	30	31		23	24	25	26	27	28	29	27	28	29	30			
							30	31												
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7			1	2	3	4	5
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26
25	26	27	28	29	30	31	29	30						27	28	29	30	31		

Submit pay request 

Check is mailed from
City of Sioux Falls to Payee 

Holiday 

2010 PAY REQUEST SCHEDULE

City of Sioux Falls ~ DBE/WBE Projects

January

Submit Pay Request to the City Monday, January 4
(due to holiday)

Check is mailed from City of Sioux Falls to Payee Monday, January 25

July

Submit Pay Request to the City Thursday, July 2

Check is mailed from City of Sioux Falls to Payee Monday, July 26

February

Submit Pay Request to the City Friday, February 5

Check is mailed from City of Sioux Falls to Payee Monday, February 22

August

Submit Pay Request to the City Friday, August 6

Check is mailed from City of Sioux Falls to Payee Monday, August 30

March

Submit Pay Request to the City Friday, March 5

Check is mailed from City of Sioux Falls to Payee Monday, March 29

September

Submit Pay Request to the City Friday, September 3

Check is mailed from City of Sioux Falls to Payee Monday, September 27

April

Submit Pay Request to the City Friday, April 2

Check is mailed from City of Sioux Falls to Payee Monday, April 26

October

Submit Pay Request to the City Friday, October 1

Check is mailed from City of Sioux Falls to Payee Monday, October 25

May

Submit Pay Request to the City Friday, May 7

Check is mailed from City of Sioux Falls to Payee Monday, May 24

November

Submit Pay Request to the City Friday, November 5

Check is mailed from City of Sioux Falls to Payee Monday, November 29

June

Submit Pay Request to the City Friday, June 4

Check is mailed from City of Sioux Falls to Payee Monday, June 28




December

Submit Pay Request to the City Friday, December 3

Check is mailed from City of Sioux Falls to Payee Monday, December 27

PAY REQUEST SCHEDULE—2010
City of Sioux Falls— DBE/WBE Projects

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
					1	2		1	2	3	4	5	6		1	2	3	4	5	6
3	4	5	6	7	8	9	7	8	9	10	11	12	13	7	8	9	10	11	12	13
10	11	12	13	14	15	16	14	15	16	17	18	19	20	14	15	16	17	18	19	20
17	18	19	20	21	22	23	21	22	23	24	25	26	27	21	22	23	24	25	26	27
24	25	26	27	28	29	30	28							28	29	30	31			
31																				
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3						1			1	2	3	4	5	
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30			
							30	31												
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7				1	2	3	4
4	5	6	7	8	9	10	8	9	10	11	12	13	14	5	6	7	8	9	10	11
11	12	13	14	15	16	17	15	16	17	18	19	20	21	12	13	14	15	16	17	18
18	19	20	21	22	23	24	22	23	24	25	26	27	28	19	20	21	22	23	24	25
25	26	27	28	29	30	31	29	30	31					26	27	28	29	30		
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
					1	2		1	2	3	4	5	6				1	2	3	4
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25
24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31	
31																				

Submit pay request  Check is mailed from City of Sioux Falls to Payee  Holiday 



CITY OF SIOUX FALLS PUBLIC WORKS

NOTICE OF AWARD

Administration/GIS
224 West Ninth Street
Sioux Falls, SD 57104-6407
(605) 367-8600
(605) 367-4605 fax

**Engineering/
Real Estate**
224 West Ninth Street
Sioux Falls, SD 57104-6407
(605) 367-8601
(605) 367-4310 fax

Environmental
1203 North Western Avenue
Sioux Falls, SD 57104-1201
(605) 367-8276
(605) 367-4886 fax

**Facilities
Management**
224 West Ninth Street
Sioux Falls, SD 57104-6407
(605) 367-8757
(605) 367-8097 fax

Fleet Management
1000 East Chambers Street
Sioux Falls, SD 57104-0936
(605) 367-7170
(605) 367-7421 fax

Landfill
224 West Ninth Street
Sioux Falls, SD 57104-6407
(605) 526-6636
(605) 526-3371 fax

Light
2000 North Minnesota Avenue
Sioux Falls, SD 57104-0109
(605) 367-7006
(605) 367-8306 fax

Street
1000 East Chambers Street
Sioux Falls, SD 57104-0936
(605) 367-7051
(605) 367-7010 fax

Utility Billing
1201 North Western Avenue
Sioux Falls, SD 57104-1201
(605) 367-7031
(605) 367-7341 fax

**Water Meters/
Utility Maintenance**
668 West Algonquin Street
Sioux Falls, SD 57104-0310
(605) 367-7020
(605) 367-7883 fax

Water Purification
2100 North Minnesota Avenue
Sioux Falls, SD 57104-0111
(605) 367-7025
(605) 367-8475 fax

Water Reclamation
4500 North Sycamore Avenue
Sioux Falls, SD 57104-9612
(605) 367-7088
(605) 367-8484 fax

PROJECT:
PROJECT NO.: 00-0000

Contractor
Address
City State Zip

The City has considered the bid submitted by you for work on the above-referenced project in response to its Invitation to Bid.

By action of the City of Sioux Falls on _____, your bid was accepted for terms in the amount of **\$0.00**.

You are required by the general provisions to execute the contract. Please sign the two copies, affix your corporate seal, and return both copies to this office. Certificates of insurance must be furnished to the City prior to commencement of the work.

If you fail to execute said contract and to furnish said bonds within ten (10) days from the date of award, the City will be entitled to consider all your rights arising out of the City's acceptance of your bid as abandoned. The City will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the City.

Public Works Engineering

By: _____ Date: _____

ACCEPTANCE OF NOTICE OF AWARD

Receipt of the above Notice of Award is hereby acknowledged:

Contractor: _____

By: _____ Date: _____

Title: _____

Return to: Public Works Engineering
ATTN: Barbara Suckstorf
224 West Ninth Street
Sioux Falls, SD 57104-6407



CITY OF SIOUX FALLS PUBLIC WORKS

NOTICE TO PROCEED

Administration/GIS
224 West Ninth Street
Sioux Falls, SD 57104-6407
(605) 367-8600
(605) 367-4605 fax

**Engineering/
Real Estate**
224 West Ninth Street
Sioux Falls, SD 57104-6407
(605) 367-8601
(605) 367-4310 fax

Environmental
1203 North Western Avenue
Sioux Falls, SD 57104-1201
(605) 367-8276
(605) 367-4886 fax

**Facilities
Management**
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Sioux Falls, SD 57104-6407
(605) 367-8757
(605) 367-8097 fax

Fleet Management
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Sioux Falls, SD 57104-0936
(605) 367-7170
(605) 367-7421 fax

Landfill
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Sioux Falls, SD 57104-6407
(605) 526-6636
(605) 526-3371 fax

Light
2000 North Minnesota Avenue
Sioux Falls, SD 57104-0109
(605) 367-7006
(605) 367-8306 fax

Street
1000 East Chambers Street
Sioux Falls, SD 57104-0936
(605) 367-7051
(605) 367-7010 fax

Utility Billing
1201 North Western Avenue
Sioux Falls, SD 57104-1201
(605) 367-7031
(605) 367-7341 fax

**Water Meters/
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Sioux Falls, SD 57104-0310
(605) 367-7020
(605) 367-7883 fax

Water Purification
2100 North Minnesota Avenue
Sioux Falls, SD 57104-0111
(605) 367-7025
(605) 367-8475 fax

Water Reclamation
4500 North Sycamore Avenue
Sioux Falls, SD 57104-9612
(605) 367-7088
(605) 367-8484 fax

PROJECT: Project Description
PROJECT NO.: 00-0000

**Contractor
Address
City State Zip**

This notice authorizes you to begin work on . You are authorized to commence work on the above project in accordance with the contract dated .

The contract shall start on the date construction work begins, but not later than ten (10) calendar days after the authorization date of this notice.

Work on this project is to be completed by .

You are required to return an acknowledged copy of this Notice to Proceed to the City.

Public Works Engineering

By: _____ Date: _____

ACCEPTANCE OF NOTICE TO PROCEED

Receipt of the above Notice to Proceed is hereby acknowledged:

Contractor: _____

By: _____ Date: _____

Title: _____

Return to: Public Works Engineering
ATTN: Barbara Suckstorf
224 West Ninth Street
Sioux Falls, SD 57104-6407

CONTRACT NO. 00-0000

THIS CONTRACT, made and entered into _____, 2006 by and between the City of Sioux Falls, South Dakota, and Company Name (the Contractor). The parties to this contract, in consideration of the mutual covenants and stipulations set out herein, agree as follows:

SECTION 1

The City hereby lets and awards to the Contractor a contract to furnish all labor, tools, and materials to provide Project Name in the City, all as described in the Notice to Bidders and Proposal of the Contractor dated Bid Opening Date.

SECTION 2

The Contractor, in accordance with the letting and awarding of the contract, and in consideration of the payment to it as hereinafter provided and under the penalty stated in the bond of \$t.00 Dollars hereto attached and made part of this contract, agrees at its own expense, to furnish all labor, tools and material necessary for the complete construction and work in complete accordance with the plans and specifications.

SECTION 3

The Contractor will commence and fully complete the construction in accordance with the bidding documents.

SECTION 4

The Contractor will accept \$t.00 Dollars as compensation for its work based on CHOOSE ONE pricing submitted in the Proposal of the Contractor. Any additional payments made by the City will be processed as provided by the City of Sioux Falls current edition of *General Conditions for Public Improvements and Supplemental Standard Specifications*.

SECTION 5

Contractor hereby represents and warrants that it does not fail or refuse to collect or remit South Dakota or City sales or use tax for transactions which are taxable under the laws of the State of South Dakota.

CITY OF SIOUX FALLS, SOUTH DAKOTA

Mayor

MOU

Attorney

Finance

ATTEST:

City Clerk

CONTRACTOR NAME

Contractor

Performance and Payment Bond

KNOW ALL MEN BY THESE PRESENTS, THAT WE, _____

(Contractor)

hereinafter called the "Principal," and _____

(Surety)

a corporation, organized and existing under the laws of the State of _____

_____, and duly authorized to transact business in the State of South Dakota,

Surety, hereinafter called "Surety," are held and firmly bound unto the City of Sioux Falls,

hereinafter called "Obligee," in the just and full sum of _____

_____ Dollars (_____) lawful money of the United

States of America to be paid to the said Obligee, which payment to be made, we bind ourselves,

our heirs, administrators, executors, successors and assigns, jointly and severally, firmly by

these presents.

The condition of this obligation is such that:

WHEREAS, Principal has entered into the Contract with the Obligee, dated this _____ day of

_____, 20____, for the conditions of such Contract No. _____

which Contract is herein referred to and made a part hereof as fully and to the same extent as if the same were entirely written herein, and

WHEREAS, it was one of the conditions of the award of the said Obligee of the Contract entered into that these presents should be executed.

PROVIDED, FURTHER, that the said Surety, for considerations received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract, to the work to be performed thereunder or to the specifications accompanying the Contract shall in any manner affect its obligation on this Bond. The Surety hereby does waive notice of any such change, extension of time, alteration or addition to the terms of the Contract, to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Obligee and the Contractor shall abridge the right of any beneficiary hereunder whose claim may be unsatisfied.

The obligation of the Surety remains in full force and effect unless the Principal complies in all respects with the terms, conditions, and specifications of the contract or any amendments made to them.

A further condition of this bond is that in the event the Principal fails to pay all just claims and demands on the part of any employee, person, firm or corporation for labor and materials furnished for or used in connection with the prosecution of the work under the Contract, or fails to pay any tax which may accrue to the State of South Dakota under the provisions of the "Use Tax Act of 1939 and the Excise Tax on Realty Improvements under SDCL 10-46A," and Sections 5-21-3 and 5-21-4 of the South Dakota Codified Laws, this bond and the sureties thereon shall be responsible to such person, firm or corporation, and to the City of Sioux Falls for the full payment of the value of such labor and materials so furnished, including payment of South Dakota use taxes and excise taxes on realty improvements.

Signed and sealed this _____ day of _____, 20____.

Individual/Partnership Principal

By _____ Typed Name _____
(Affix Seal if available)

Corporate Principal

By _____ Typed Name _____
Title _____ Business Name _____
(Affix Corporate Seal if available) Address _____

Corporate Surety

By _____

Typed Name _____

Title _____
(Affix Corporate Seal if available)

Business Name _____

Address _____

Countersigned by _____

Typed Name _____

South Dakota Resident Agent

Business Name _____

Address _____

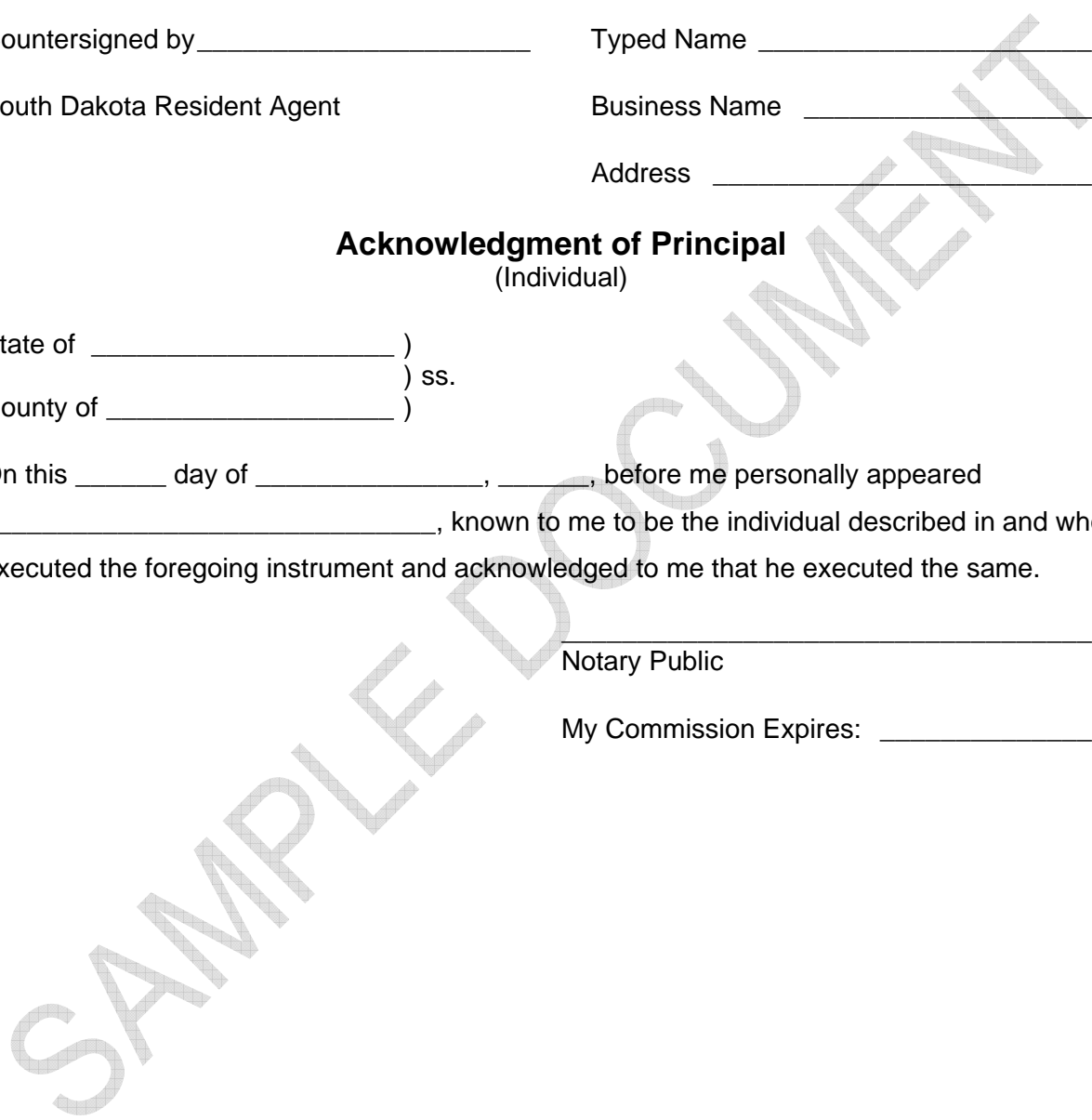
Acknowledgment of Principal
(Individual)

State of _____)
County of _____) ss.

On this _____ day of _____, _____, before me personally appeared _____, known to me to be the individual described in and who executed the foregoing instrument and acknowledged to me that he executed the same.

Notary Public

My Commission Expires: _____



Acknowledgment of Surety

(Corporate Officer)

State of _____)
) ss.
County of _____)

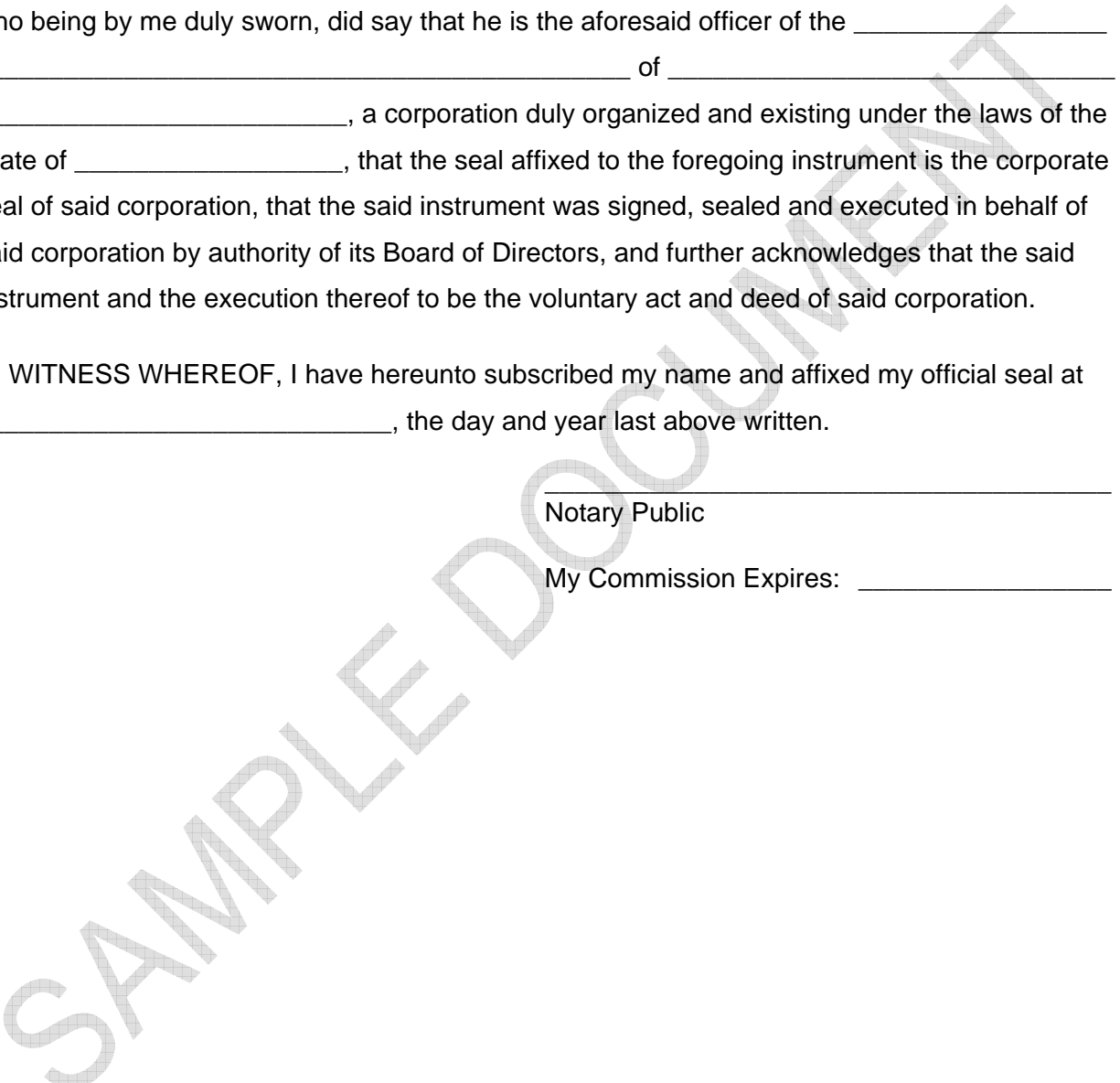
On this _____ day of _____, _____, before me, a Notary Public in and for said County, personally appeared _____ personally known to me who being by me duly sworn, did say that he is the aforesaid officer of the _____ of _____

_____, a corporation duly organized and existing under the laws of the State of _____, that the seal affixed to the foregoing instrument is the corporate seal of said corporation, that the said instrument was signed, sealed and executed in behalf of said corporation by authority of its Board of Directors, and further acknowledges that the said instrument and the execution thereof to be the voluntary act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal at _____, the day and year last above written.

Notary Public

My Commission Expires: _____



Acknowledgment of Surety
(Attorney-in-Fact)

State of South Dakota)
) ss.
County of Minnehaha)

On this _____ day of _____, _____, before me personally appeared _____, known to me or satisfactorily proven to be the person whose name is subscribed as attorney in fact for _____ and acknowledged that he executed the same as the act of his principal for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto subscribed my name and affixed my official seal at _____, the day and year last above written.

Notary Public

My Commission Expires: _____

SAMPLE DOCUMENT

Bid Package Inclusions for DBE Applicable only Projects

Form ID	Form Description	Form Purpose and/or SUBMITTAL Time Frame
BAR	Bidders Activity Report	ALL contractors MUST submit with bid proposal.
	Certified Disadvantaged Business Enterprise (DBE) Directory	Contact City Contract Compliance Specialist (605-367-7125) for latest edition of this directory.
Form A	Schedule of Disadvantaged Business Enterprise Participation (DBE)	All contractors submit with bid proposal if DBE contractor or subs are used on project.
Form A-1	DBE Notification of Intent to Sub-contract	Must be submitted within seven (7) days of notification of bid award for project, failure to do so will disqualify bid.
Form B	DBE Good Faith Efforts Compliance Summary	Must be submitted by all bidders (NOT submitting Form A) with proposal. Documentation MUST be included.
	Good Faith Effort Guidance	Informational (nonexclusive) for use by contractors to make good faith efforts.
Form C	Certification of DBE Payments	Must be submitted by general contractor within 30 days of the project completion.
Form E	Contractor/Subcontractor Debarment Certification	Certification of NON-Debarment completed by ALL Contractors and Subcontractors prior to starting work.
EEO & AAR	Equal Opportunity and Affirmative Action Requirements	Informational clauses to be included in ALL construction and non-construction contracts associated with project.
Form H	Contractor and Subcontractor Activity Report	To be completed by prime contractor listing all subcontractors employed on the project. One due at contract award, one due at contract completion.
Form I	Certification of Payments to Influence Federal Transactions and Equal Opportunity and Non-discrimination Certification for Federally Assisted Contracts	Anti-kickback certification to be completed by prime and all subcontractors prior to starting work. To be completed by the prime contractor and ALL subcontractors prior the starting work. Prime contractor to post copy at job site.
Form J	Additional Representations, Certifications and Other Statements of Bidders	Certification of non-segregation of employees, Organizational Conflicts of Interest, Clean Air/Water, Price Determinations. To be completed by the prime and all subcontractors prior to starting work.

ADDITIONAL FORMS FOR PROJECTS

Debar 2	Must be submitted with bid proposal
Debar 1	Must be submitted within seven (7) days of notificatio of bid award for project, failure to do so may disqualify bid.
EEO-7	
OSHA-1	
Archaeol-1	
PALVF-1	

Note(s):

The forms/reports listed are required from the prime and all subcontractors at all tiers including subcontractors hired by other subcontractors.

If HUD Assistance is associated with this project contact the City Contract Compliance Specialist, additional requirements and/or certifications may be required.

BIDDER'S ACTIVITY REPORT

In accordance with 49 CFR Part 26.11(c), a bidder's list must be created and maintained of ALL firms bidding on prime contracts and bidding or quoting subcontracts; therefore, the following information is required.

THIS FORM TO BE COMPLETED AND RETURNED WITH BID SUBMITTAL BY ALL BIDDING ENTITIES.

Prime Contractor: _____

Project Owner: _____

Address: _____

Address: _____

City, State, Zip: _____

City, State, Zip: _____

Prime's Racial/Ethnic Code: _____

Project Name: _____

Is Prime a Certified DBE?: _____

Project Address: _____

(Use codes below to complete first column.)

City, State, Zip: _____

LIST ALL SUBCONTRACTORS, VENDERS, AND/OR SUPPLIERS CONTACTED FOR QUOTES PERTAINING TO THIS BID.

Racial / Ethnic Code	Company Name	Contact Person	Address	City	State	Zip Code	Phone Number

If any of the above firms are "Certified Disadvantaged Business Enterprises," please designate by placing an "X" in the first column next to the appropriate code used below.

Racial/Ethnic Code
1. White American
2. Black American
3. Native American
4. Hispanic American
5. Asian/Pacific American
6. Women Business Enterprise
7. Other

COMPLETED BY: _____

DATE: _____

The latest

Certified Disadvantaged Business Enterprise Directory

can be obtained by contacting:

City of Sioux Falls
Community Development Office
ATTN: Bill Hassler
235 W. Tenth Street
Sioux Falls, SD 57104
(605) 367-7125
E-Mail: whassler@siouxfalls.org

Or:

S. D. Department of Transportation
Attn: Denise Voorhes
700 East Broadway
Pierre, SD 57501
(605) 773-4906

Or:

Or locate on Internet at: www.SDDOT.com/

Project No. _____

FORM A

City of Sioux Falls, SD
Schedule of DBE Participation

Form A or Form B shall be completed and submitted with the bid proposal. Failure to do so will cause the bid to be rejected.

Total Bid Amount = \$ _____

Name and Address of Subcontractor	Type of Work and Contract Items or Parts Thereof to be Performed	Dollar Amount of Subcontracted Work	DBE Percentage
TOTAL			

The undersigned intends to enter into a formal agreement with the DBE Contractors listed in this schedule conditioned upon notification of apparent low bid. Form A-1 must be completed for **each** subcontractor/vendor/supplier listed above and shall be given to the Project Owner for submittal to the Contract Compliance Specialist of the City of Sioux Falls **within 7 days** of the bid award date.

Authorized Signature _____

Date _____

Title _____

Firm Name _____

City of Sioux Falls, SD DBE Notification of Intent to Subcontract

Project Name: _____ Bid Opening Date: _____

Contractor: _____

Address: _____

Hereby intends to subcontract or purchase materials for the following work items to:

DBE: _____

ITEM NUMBER	ITEM	UNITS	QUANTITY	UNIT COST	AMOUNT

Please attach additional sheets if necessary.

Total amount of subcontract \$ _____

Amount counting toward DBE participation (60 percent for regular dealers and hauling performed by DBE trucks)

DBE Sub or Supplier Signature _____

Title _____

Date _____

Prime Contractor Signature _____

Title _____

Date _____

This form must be completed by the apparent low bidder and the DBE and returned within 7 days of the bid award date for **each** DBE commitment listed on Form A. It may be faxed or mailed to the City's Contract Compliance Specialist at (605) 367-8798. **Note:** Instead of completing the table above, prime may sign this form and attach a signed copy of the DBE's actual quote. *Award will be contingent upon receipt of this form.*

Project No.: _____ Project Address: _____

City of Sioux Falls, SD

DBE Good Faith Efforts Compliance Summary

This form shall be completed and submitted with the bid proposal if the DBE goal cannot be met.

Name and Address of Certified Disadvantaged Business Enterprise	Dates of Contact	Method of Contact	Documents Attached	Reason DBE was not used
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				

Failure to accomplish and document good faith efforts may be cause for disqualification of this bid.**Bidder MUST attach documentation regarding the good faith efforts put forth.**

Documents may include copies of letters sent, advertisements used, unacceptable bid responses, etc.

Good faith efforts must show that the efforts could reasonably be expected to produce a level of DBE participation sufficient to meet the DBE goal of this project.

Authorized Signature: _____ Date: _____

Title: _____ Firm Name: _____

Good Faith Efforts Guide

This is only a guide and is not meant to convey an absolute as to the efforts to be made in contacting and contracting with an eligible Disadvantaged Business Enterprise.

Each contractor submitting a bid to the City of Sioux Falls or their recipient for a project covered by this plan, shall exercise good faith efforts to subcontract at a minimum a portion of the project equal to the percentage goal indicated in the Bidders Notice for DBE participation. Nothing in this subsection is intended to preclude or discourage a contractor from engaging in additional activities to achieve or exceed this goal.

To determine whether a competitor has failed to meet DBE participation, the City must decide whether the efforts made by the competitor to obtain DBE participation (Form B) were “good faith efforts.” **Efforts that are of usual and normal occurrence are not ordinarily considered good faith efforts to meet the goals.** The City will determine, given all relevant circumstances, if the efforts reasonably produced a level of DBE participation sufficient to meet the goals.

The City presents here a list of the examples of “good faith efforts” that contractors may make in obtaining DBE participation. It is not intended to be a mandatory checklist. The City does not insist that a contractor do any one or any particular combination of the things on the list, nor is the list intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases. In determining whether a contractor has made "Good Faith Efforts", it will usually be important for the City to look not only at the different kinds of efforts that the contractor has made, but also the quantity and intensity of those efforts. Therefore, documentation specific to each DBE contacted should be submitted with Form B.

1. Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by the City of Sioux Falls or recipient to inform DBEs of contracting and subcontracting opportunities;
2. Whether the contractor advertised in general circulation, trade association, and disadvantaged-focus media concerning the subcontracting opportunities. Simple placement of an ad in an above mentioned outlet does not constitute good faith efforts. Follow-up contacts must be made, responses documented, and provided with Form B;
3. Whether the contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited in sufficient time to allow the DBEs to participate effectively;
4. Whether the contractor followed up initial solicitations of interest by contacting DBEs to determine with certainty whether the DBEs were interested;
5. Whether the contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goals (including, where appropriate, breaking down contracts into economically feasible units to facilitate DBE participation);
6. Whether the contractor provided interested DBEs with adequate information about the plans, specifications, and requirements of the contract;

7. Whether the contractor negotiated in good faith with interested DBEs, not rejecting DBEs as unqualified or overpriced without sound reasons based on a thorough investigation of their capabilities. **Sufficient documentation must be provided to prove a statement of overpricing (i.e., quotes from other subs for exactly the same work);**
8. Whether the contractor made efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance required by the City, their recipient, or contractor; and
9. Whether the contractor effectively used the services of available disadvantaged/women community organizations; disadvantaged/women contractor groups; local, state, and federal Disadvantaged Business Enterprise assistance offices; and other organizations that provide assistance in the recruitment and placement of DBEs.

The Contract Compliance Specialist will be responsible for determining whether a bidder/offeror who has not met the contract goal has documented sufficient good faith efforts to be regarded as responsive.

The Contract Compliance Specialist will ensure that all information is complete, accurate, and adequately documents the bidder's/offeror's good faith efforts before committing to the performance of a contract by the bidder/offeror.

City of Sioux Falls, SD

Certification of DBE Payments

This form shall be completed and filed not later than 30 days after project completion. An original and one copy of this certification are to be submitted to the project owner. The project owner will forward the original to the City's Contract Compliance Specialist and retain one copy for their project files.

Project Name _____

Project No. _____

Total Project Cost \$ _____

The undersigned prime contractor on the federally funded project listed above hereby certifies that payment(s) were made to the DBE firms listed below for work performed and/or materials furnished under this contract.

Name of DBE Firm	Date of Payment	Actual Payment(s)	Goal Percentage	Actual % of Total Cost
		\$	%	%
		\$	%	%
		\$	%	%
		\$	%	%
		\$	%	%
		\$	%	%
		\$	%	%
		\$	%	%
		\$	%	%
		\$	%	%
		\$	%	%
		\$	%	%
		\$	%	%
		\$	%	%
		\$	%	%

All payments to each firm should be listed separately. Please attach additional sheets if necessary.

Authorized Signature: _____ Date: _____

Title: _____ Firm Name: _____

Contractor Debarment Certification
(To be Completed by the Prime and All Subcontractors)

Project Name

Project Number (if any)

1. The undersigned, having executed a contract with _____
(Owner/Contractor/Subcontractor)

_____ for _____
(Nature of Work)

_____ in the amount of \$ _____

in the construction of the above-identified project, certifies that:

- a. No firm, partnership, or association in which the undersigned contractor has an interest is designated as an ineligible contractor by the Comptroller General of the United States pursuant to Section 5.6(b) of the Regulations of the Secretary of Labor, Part 5 (29 CFR, Part 5), or pursuant to Section 3(a) of the Davis-Bacon Act, as amended (40 U.S.C. 276a-2(a)).
- b. No part of the aforementioned contract has been or will be subcontracted to any subcontractor if such subcontractor or any firm, corporation, partnership, or association in which such subcontractor has a substantial interest is designated as an ineligible contractor pursuant to any of the aforementioned regulatory or statutory provisions.
- c. The undersigned contractor agrees to obtain and forward to the Owner for submittal to the City of Sioux Falls, Department of Community Development, within ten days after the execution of any subcontract, including those executed by his subcontractors and any lower tier subcontractors, this Contractor Certification executed by any subcontractor(s).

2. The undersigned, having executed a contract for construction of or within the above-identified project, acknowledges the statements below to be true and accurate.

a. The legal name and the business address of the undersigned are:

Federal Tax ID Number

b. The undersigned is:

1. A Sole Proprietorship _____

3. A Corporation Organized in the State of: _____

2. A Partnership _____

4. Other Organization (Describe) _____

c. The name(s), title(s), and addresses of the owners, partners, or officers of the undersigned are:

	Name	Title	Nature of Interest
1.			
2.			
3.			
4.			
5.			

d. The names and addresses, of all persons, both natural and corporate, having a substantial interest in the undersigned, and the nature of the interest are (if none, so state):

	Name	Title	Nature of Interest
1.			
2.			
3.			
4.			
5.			

e. The names, addresses, and trade classifications of all other building construction contractors in which the undersigned has a substantial interest are (if none, so state):

	Name	Title	Nature of Interest
1.			
2.			
3.			
4.			
5.			

Firm Name

Date

Authorized Signature

Title

WARNING

U.S. Criminal Code, Section 1010, Title 18, U.S.C. provides in part "Whoever ... makes, passes, utters, or publishes any statement, knowing the same to be false... shall be fined not more than \$5,000, or imprisoned not more than two years, or both."

Equal Employment Opportunity and Affirmative Action Requirements on Federal and Federally Assisted Construction Contracts

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)

The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation in each trade -----	1.2 %
Goals for female participation in each trade -----	6.9 %

The Contractor's compliance with the executive order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a). The hours of minority and female employment and training must be substantially uniform throughout the length of the contract and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the executive order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

As used in this Notice and in the contract resulting from this solicitation, the "covered area" is Sioux Falls, Minnehaha County, South Dakota.

This notice shall be included in, and shall be a part of, all solicitations for offers and bids on all federal and federally assisted construction contracts or subcontracts.

Equal Opportunity Clauses

The equal opportunity clause published at 41 CFR 60-1.4(a) of this chapter is required to be included in, and is part of, all nonexempt federal contracts and subcontracts, including construction contracts and subcontracts. The equal opportunity clause published at 41 CFR 60-1.4(b) is required to be included in, and is a part of, all nonexempt federally assisted construction contracts and subcontracts.

In addition to the clauses described above, all federal contracting officers, all applicants, and all non-construction contractors, as applicable, shall include the specifications set forth in this section in all federal and federally assisted construction contracts in excess of \$10,000 to be performed in the covered areas, and in construction subcontracts in excess of \$10,000 as necessary in whole or in part to the performance of non-construction federal contracts and subcontracts covered under the executive order.

Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246):

1. As used in these specifications:
 - A. "Covered area" means the geographical area described above from which this contract resulted.
 - B. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority.
 - C. "Employer identification number" means the federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - D. "Minority" includes:
 - (i) Black (all persons having origins in any of the black African racial groups not of Hispanic origin);

- (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation, and which are set forth in the solicitations from which this contract resulted.
 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in geographical areas where they do not have a federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women, shall excuse the Contractor's obligations under these specifications, Executive Order 11246, nor the regulations promulgated pursuant thereto.
 6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
 7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant, and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor; along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor, a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly includes minorities and women, including upgrading programs, apprenticeship, and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with on-site supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after-school, summer, and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation, at least of all minority and female personnel for promotional opportunities, and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are non-segregated, except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations, and other business associations.

- p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7a through p of these specifications, provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the executive order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the executive order if a specific minority group of women is underutilized).
 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from government contracts pursuant to Executive Order 11246.
 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the executive order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the government, and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
 15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

PRIME CONTRACTOR AND SUBCONTRACTOR ACTIVITY REPORT

FORM H

Owner: _____

Prime Contractor: _____

Address: _____

Address: _____

Project Name: _____

Contract Amount: \$ _____

Project Address: _____

Federal Tax ID Number _____

Racial/Ethnic Identification Code(see code below): _____

ONE COPY OF THIS FORM TO BE COMPLETED AND RETURNED AT BID AWARD, ONE COPY COMPLETED AND SUBMITTED WITH FINAL PAY REQUEST

Racial/Ethnic Code 1-7 (see below)	Certified DBE (Y or N)	Subcontractor Federal Tax ID Number	SUBCONTRACTOR NAME AND ADDRESS					
			Company Name	Address	City	State	Zip Code	Phone Number

- | |
|---|
| <p>Racial/Ethnic Code</p> <p>1. White American 5. Asian/Pacific American</p> <p>2. Black American 6. Women Business Enterprise</p> <p>3. Native American 7. Other</p> <p>4. Hispanic American</p> |
|---|

COMPLETED BY: _____

DATE: _____

MAKE COPIES IF ADDITIONAL SPACE IS NEEDED

PRIME CONTRACTOR AND SUBCONTRACTOR ACTIVITY REPORT

FORM H

Owner: _____

Prime Contractor: _____

Address: _____

Address: _____

Project Name: _____

Contract Amount: \$ _____

Project Address: _____

Federal Tax ID Number _____

Racial/Ethnic Identification Code(see code below): _____

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- | |
|--|
| <p align="center">Racial/Ethnic Code</p> <p>1. White American 5. Asian/Pacific American
 2. Black American 6. Women Business Enterprise
 3. Native American 7. Other
 4. Hispanic American</p> |
|--|

COMPLETED BY: _____

DATE: _____

MAKE COPIES IF ADDITIONAL SPACE IS NEEDED

Certification of Payments to Influence Federal Transactions

Business Name

Project Name and Location

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a member of congress, an officer or employee of congress, or an employee of a member of congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of an agency, a member of congress, an officer or employee of congress, or an employee of a member of congress in connection with this federal contract, grant, loan, or cooperative

agreement, the undersigned shall complete and submit Standard Form-LLL, Disclosure Form to Report Lobbying, in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

I hereby certify that all the information stated herein, as well as any information provided in the accompaniment herewith, is true and accurate.

Warning: HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties.
(18 U.S.C. 1001, 1010, 1012; 31 U.S.C. 3729, 3802)

Name of Authorized Official

Title

Signature

Date

Additional Representations, Certifications, and Other Statements of Bidders

Contents

Clause

1. Certificate of Independent Price Determination
2. Organizational Conflicts of Interest Certification
3. Clean Air and Water Certification
4. Certification of Non-segregated Facilities

1. Certification of Independent Price Determination

(a) The bidder certifies that:

(1) The prices in this bid have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other bidder or competitor relating to (i) those prices, (ii) the intention to submit a bid, or (iii) the methods or factors used to calculate the prices offered;

(2) The prices in this bid have not been and will not be knowingly disclosed by the bidder, directly or indirectly, to any other bidder or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a competitive proposal solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the bidder to induce any other concern to submit or not to submit a bid for the purpose of restricting competition.

(b) Each signature on this certification form is considered to be a certification that the signatory:

(1) is the person in the bidder's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a) (1) to (a) (3) above; or

(2) has been authorized to act as agent for the bidding organization to certify that none of the principals of the bidding organization have not and will not participate in any action contrary to subparagraphs(a) (1) through (a) (3) above.

(c) Non-collusive certification

(1) Each bidder certifies, by signature of this certification, that he/she has not colluded with any other person, firm, or corporation in regard to any bid submittal in response to this solicitation.

2. Organizational Conflicts of Interest Certification

By signature to this certification, the bidder certifies that to the best of its knowledge, belief, and except as otherwise disclosed in writing, he or she does not have any organizational conflict of interest which is defined as a situation in which the nature of work to be performed under this proposed contract and the bidder's organizational, financial, contractual, or other interests may, without some restriction on future activities:

(a) Result in an unfair competitive advantage to the bidder; or

(b) Impair the bidder's objectivity in performing the contract work.

3. Clean Air and Water Certification (applicable to contracts exceeding \$100,000)

The bidder certifies that:

(a) Any facility to be used in the performance of this contract is, is not, listed on the Environmental Protection Agency List of Violating Facilities;

(b) The bidder will immediately notify the City of Sioux Falls Community Development Department Project Specialist, before award, of the receipt of any communication from the administrator, or a designee of the Environmental Protection Agency, indicating that any facility that the bidder proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and

(c) The bidder will include a certification substantially the same as this certification. Include this paragraph(c), in every nonexempt subcontract.

4. Certification of Non-segregated Facilities (applicable to contracts exceeding \$10,000)

(a) The bidder's attention is called to Form G, entitled *Equal Opportunity Clause for Federally Assisted Contracts*.

(b) "Segregated facilities," as used in the provision, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants or other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and

housing facilities provided for employees that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise.

- (c) By the submission of this bid, the bidder certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The bidder agrees that a breach of this certification is a violation of the Equal Employment Opportunity clause in the contract.
- (d) The bidder further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) prior to entering into subcontracts which exceed \$10,000 and

are not exempt from the requirements of the Equal Employment Opportunity clause, it will:

- (1) Obtain identical certifications from the proposed subcontractors;
- (2) Retain a copy of the certifications in its files and provide the original to the Sioux Falls Community Development Department Project Specialist; and
- (3) Forward this certification to the proposed subcontractors.

Notice to Prospective Subcontractors of the Requirements of this Certification:

This certification must be submitted before the award of a subcontract, which is not exempt from the provisions of the Equal Employment Opportunity Clause of the prime contract.

Note: The penalty for making false statements in bids is prescribed in 18 U.S.C. 1001.

The bidder hereby certifies that the information contained in these certifications and representations is accurate, complete, and current.

(Signature)

(Date)

(Typed or Printed Name)

(Title)

(Company Name)

(Company Address)

DAVIS-BACON AND RELATED ACTS

LABOR STANDARDS

Contractors performing work on construction projects which have been provided assistance through the American Recovery and Reinvestment Act of 2009 must fulfill the requirements of the Labor Standards Provisions for federally assisted construction contracts. These standards are located at the end of this section.

WEEKLY CONTRACTOR PAYROLLS

Each week as work progresses, the contractor must submit to the Owner a copy of all weekly payrolls and required attachments stipulated therein. Sample suggested payrolls may be obtained from the Owner upon request. All weekly payrolls shall contain or have attached the following:

1. Name of each employee and the last four digits of the social security number.
2. Classification of employees (same as shown on wage determination).
3. Rate of pay not less than that shown on the wage determination.
4. Hours worked each day and total for each week for each employee.
5. All deductions made.
6. Net amount paid to employee.
7. The following certification:

"I certify that the payroll is correct and complete, that the wage rates contained therein are not less than the applicable rates contained in the Wage Determination decision of the Secretary of Labor and that the classification set forth for each laborer or mechanic conform with the work he performs."

(Signature)

(Title)

COMPLIANCE WITH THE COPELAND (ANTI-KICKBACK) ACT

The following anti-kickback statement must be submitted with each set of weekly payrolls:

"I, (name of signatory party), (title), do hereby state: That I pay or supervise the payment of the persons employed by (contractor or subcontractor) on the (work or building); that during the payroll period commencing on the _____ day of _____, 20____, and ending the _____ day of _____, 20____, all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly from the full weekly wages earned by any person, other than permissible deductions, as defined in Regulations, Part 3 (CFR Part 3)

issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948; 63 Stat. 108; 72 Stat. 967; and 40 U.S.C. 276c), and described below: (Paragraph describing deductions, if any)"

(Signature)

(Title)

All prime contractors shall include the wage determination and all the labor standards provisions in all subcontracts as herein specified.

The Contractor shall make employment records available for inspection by authorized representatives of the State of South Dakota and the Department of Labor, and will permit employees to be interviewed during working hours by these representatives. Payroll records will be maintained during the course of the work by the Prime Contractor, including a copy of the payroll of each Subcontractor and they shall be preserved for a period of three years thereafter.

Each monthly engineering estimate must be accompanied by the following certificate executed by each Prime Contractor employing mechanics and laborers at the site on work in which the Federal government is to participate:

Principal Contractor _____

Project Name _____

Project No. _____

I, _____, as official representative of the above named principal contractor do hereby certify as follows:

- All Labor Standards Requirements have been fulfilled by principal contractor and all subcontractors under this contract; or
- There is an honest dispute regarding the required provisions.

Explanation: _____

(Signature)

(Title)

In the event of a violation of the Labor Standards provisions of the contract by the Prime Contractor or any Subcontractor, the owner may, after notice to the Contractor, suspend further payments or proceed to terminate the contract as provided in the Labor Standards section of the Contract.

General Decision Number: SD080009 08/22/2008 SD9

Superseded General Decision Number: SD20070011

State: South Dakota

Construction Types: Heavy and Highway

Counties: South Dakota Statewide.

Modification Number	Publication Date
0	02/08/2008
1	07/11/2008
2	08/01/2008
3	08/22/2008

SUSD2008-001 07/11/2008

	Rates	Fringes
Carpenter/Form Builder		
Lincoln, Minnehaha,		
Pennington.....	\$ 20.44	
Remaining Counties.....	\$ 20.53	
Concrete Finisher		
Lincoln, Minnehaha,		
Pennington.....	\$ 19.41	
Remaining Counties.....	\$ 19.58	
Electrician		
Lincoln, Minnehaha,		
Pennington.....	\$ 20.29	
Remaining Counties.....	\$ 20.25	
Laborers:		
GROUP 1		
Lincoln, Minnehaha,		
Pennington.....	\$ 14.19	
Remaining Counties.....	\$ 14.12	
GROUP 2		
Lincoln, Minnehaha,		
Pennington.....	\$ 15.79	
Remaining Counties.....	\$ 15.75	
GROUP 3		
Lincoln, Minnehaha,		
Pennington.....	\$ 17.47	
Remaining Counties.....	\$ 17.50	
GROUP 4		
Lincoln, Minnehaha,		
Pennington.....	\$ 19.41	
Remaining Counties.....	\$ 19.58	

LABORER CLASSIFICATIONS:

GROUP 1 - Air Tool Operator, Common Laborer, Landscape Worker, Flagger, Pilot Car Driver, Trucks under 26,000 GVW, Blue Top Checker and Materials Checker.

GROUP 2 - Mechanic Tender, Pipe Layer (except culvert), Form Builder Tender, Special Surface Finish Applicator and Striping.

GROUP 3 - Asphalt Plant Tender, Pile Driver Leadsman, Form Setter and Oiler/Greaser.

GROUP 4 - Grade Checker.

Painter:

Lincoln, Minnehaha,
 Pennington.....\$ 19.41
 Remaining Counties.....\$ 19.58

Power equipment operators:

GROUP 1

Lincoln, Minnehaha,
 Pennington.....\$ 15.19
 Remaining Counties.....\$ 14.98

GROUP 2

Lincoln, Minnehaha,
 Pennington.....\$ 16.58
 Remaining Counties.....\$ 16.57

GROUP 3:

Lincoln, Minnehaha,
 Pennington.....\$ 18.09

GROUP 3

Remaining Counties.....\$ 18.18

GROUP 4

Lincoln, Minnehaha,
 Pennington.....\$ 18.62
 Remaining Counties.....\$ 18.63

GROUP 5

Lincoln, Minnehaha,
 Pennington.....\$ 20.88
 Remaining Counties.....\$ 20.92

POWER EQUIPMENT OPERATOR CLASSIFICATIONS:

GROUP 1 - Concrete Paving Cure Machine, Concrete Paving Joint Sealer, Conveyor, Tractor (farm type with attachments), Self Propelled Broom, Concrete Routing Machine, Paver Feeder and Pugmill.

GROUP 2 - Bulldozer 80 HP or less, Front End Loader 1.25 CY or less, Self Propelled Roller (except Hot Mix), Sheepsfoot/50 Ton Pneumatic Roller, Pneumatic Tired Tractor or Crawler (includes Water Wagon and Power Spray units), Wagon Drill, Air Trac, Truck Type Auger and Concrete Paving Saw.

GROUP 3 - Asphalt Distributor, Bulldozer over 80 HP, Concrete Paving Finishing Machine, Backhoes/Excavators 20 Tons or less, Crusher (may include internal screening plant), Front End Loader over 1.25 CY, Rough Motor Grader, Self Propelled Hot Mix Roller, Push Tractor, Euclid or Dumpster and Material Spreader.

GROUP 4 - Asphalt Paving Machine Screed, Asphalt Paving Machine, Cranes/Derricks/Draglines/Pile Drivers and Shovels 30 to 50 tons, Backhoes/Excavators 21 to 40 tons, Maintenance Mechanic and Scrapers.

GROUP 5 - Asphalt Plant, Concrete Batch Plant, Backhoes/Excavators over 40 tons, Cranes/Derricks/Draglines/Pile Drivers and Shovels over 50 tons, Heavy Duty Mechanic, Finish Motor Grader, Automatic Fine Grader, Milling Machine and Certified Welder.

Truck drivers:

GROUP 1

Lincoln, Minnehaha,
Pennington.....\$ 14.75
Remaining Counties.....\$ 14.57

GROUP 2

Lincoln, Minnehaha,
Pennington.....\$ 17.22
Remaining Counties.....\$ 17.15

TRUCK DRIVER CLASSIFICATIONS:

GROUP 1 - Tandem Truck without trailer or pup and Single Axle
over 26,000 GVW with Trailer.

GROUP 2 - Semi Tractor and Trailer and Tandem Truck with Pup.

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.
=====

Unlisted classifications needed for work not included within
the scope of the
classifications listed may be added after award only as
provided in the labor
standards contract clauses (29 CFR 5.5(a)(1)(ii)).

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In the listing above, the "SU" designation means that rates
listed under the
identifier do not reflect collectively bargained wage and
fringe benefit
rates. Other designations indicate unions whose rates have
been determined
to be prevailing.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can
be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on
a wage
determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests
for summaries
of surveys, should be with the Wage and Hour Regional Office
for the area in
which the survey was conducted because those Regional Offices
have
responsibility for the Davis-Bacon survey program. If the
response from this

initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7).
Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

FEDERAL LABOR STANDARDS PROVISIONS

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A.1 Minimum Wages

- (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act(29CFR Part 3), the full amount of wages and bona fide fringe benefits(or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR Part 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- (ii)(a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. EPA shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and EPA or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by EPA or its designee to the Administrator of the Wage and Hour Division, Employment standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise EPA or its designee or will notify EPA or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and EPA or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), EPA or its designee shall refer the questions, including the views of all interested parties and the recommendation of EPA or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise EPA or its designee or will notify EPA or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a

separate account assets for the meeting of obligations under the plan or program.
(Approved by the Office of Management and Budget under OMB Control Number
1215-0140.)

2. Withholding.

EPA or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, EPA or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. EPA or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. Payrolls and basic records

- (i) Basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents there of the types described in Section 1(b)(2)B of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Certified weekly payrolls shall contain the name and last four digits of the social security number. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(b) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB control Numbers 1215-0140 and 1215-0017.)
- (ii)(a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to EPA or its designee if the agency is a party to the contract, but if the agency is not such party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may

be, for transmission to EPA or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of management and Budget under OMB Control Number 1215-0149.)

- (b) Each payroll submitted shall be accompanied by a "Statement of compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

That the payroll for the payroll period contains the information required to be maintained under 29 CFR Part 5.59(a)(3)(i) and that such information is correct and complete;

That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3.

That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of compliance" required by paragraph A.3(ii)(b) of this section.
- (d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph A.3(i) of this section available for inspection, copying, or transcription by authorized representatives of EPA or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, EPA or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.

4. **Apprentices and trainees.**

- (i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevail for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines

that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) **Equal employment opportunity.** The utilization of apprentices, trainees, and journeymen under this part shall be in conformity with the equal and employment opportunity requirements of executive order 11246, as amended, and 29 CFR Part 30.

5. **Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.
6. **Subcontracts.** The contractor or subcontractor will insert in any subcontracts the clauses contained in 29 CFR 5.5 (a)(1) through (10) and such other clauses as EPA or its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.
7. **Contract termination; debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
8. **Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.
9. **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and EPA or its designee, the U.S. Department of Labor, or the employees or their representatives.
10. **Certification of Eligibility**
 - (i). By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded EPA contracts or participate in EPA programs pursuant to 24 CFR Part 24.
 - (ii) No part of this contract shall be subcontracted to any person or firm ineligible for

award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded EPA contracts or participate in EPA programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part "Whoever, for the purpose of...influencing in any way the action of such Administration...makes, utters or publishes any statement, knowing the same to be false...shall be fined not more than \$5,000 or imprisoned not more than two years or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek, whichever is greater.

Violation: liability for unpaid wages: liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

Withholding for unpaid wages and liquidated damages. EPA or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety

No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96).

The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as the Administrator of Environment and Natural Resources or the Secretary of Labor shall direct as a means of enforcing such provisions.

SECTION 01340
SUBMITTALS
PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Mechanics and administration of the submittal process for:
 - a. Shop Drawings.
 - b. Samples.
 - c. Miscellaneous submittals.

1.2 DEFINITIONS

A. Shop Drawings:

1. See General Conditions.
2. Product data and samples are Shop Drawing information.

B. Miscellaneous Submittals:

1. Submittals other than Shop Drawings:
2. Representative types of miscellaneous submittal items include but are not limited to:
 - a. Construction schedule.
 - b. Concrete, soil compaction, and pressure test reports.
 - c. Manufacturer's installation certification letters.
 - d. Warranties.
 - e. Cost breakdown (Schedule of Values).

1.3 TRANSMITTAL OF SUBMITTALS

A. Shop Drawings and Samples:

1. Transmit all submittals to:

HDR Engineering, Inc.
6300 South Old Village Place
Suite 100
Sioux Falls, SD, 57108
Attn: Steve Hoff

2. Utilize two copies of attached blank transmittal to transmit all Shop Drawings and samples.
3. All submittals must be from Contractor and bear his approval stamp. Submittals will not be received from or returned to subcontractors.
 - a. Shop Drawing submittal stamp shall read "(Contractor's Name) has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval".
4. Provide submittal information defining specific equipment or materials utilized on the project. Generalized product information, not clearly defining specific equipment or materials to be provided, will be rejected.
5. Calculations required in individual specification sections will be received for information purposes only, as evidence calculations have been performed by individuals meeting specified qualifications, and will be returned stamped "E. Engineer's Review Not Required" to acknowledge receipt.

6. Submittal schedule:
 - a. Schedule of Shop Drawings:
 - 1) Submitted and approved within 20 days of receipt of Notice to Proceed.
 - 2) Account for multiple transmittals under any specification section where partial submittals will be transmitted.
 - 3) Schedule shall allow a minimum review time of 14 Calendar days after received by the Engineer for each submittal
 - b. Shop Drawings:
 - 1) Submittal and approval prior to 50 percent completion.
- B. Miscellaneous Submittals:
 1. Transmit under Contractor's standard letter of transmittal or letterhead.
 2. Submit in triplicate or as specified in individual specification section.
 3. Transmit to:

HDR Engineering, Inc.
6300 South Old Village Place
Suite 100
Sioux Falls, SD 57108
Attn: Steve Hoff

1.4 PREPARATION OF SUBMITTALS

- A. Shop Drawings:
 1. Scope of any submittal and letter of transmittal:
 - a. Limited to one Specification Section.
 - b. Do not submit under any Specification Section entitled (in part) "Basic Requirements".
 2. Numbering letter of transmittal:
 - a. Include as prefix the specification section number followed by a series number, "-xx", beginning with "01" and increasing sequentially with each additional transmittal.
 - b. If more than one submittal under any specification section, assign consecutive series numbers to subsequent transmittal letters.
 3. Describing transmittal contents:
 - a. Provide listing of each component or item in submittal capable of receiving an independent review action.
 - b. Identify for each item:
 - 1) Manufacturer and Manufacturer's drawing or data number.
 - 2) Contract Document tag number(s).
 - 3) Unique page numbers for each page of each separate item.
 4. Resubmittals:
 - a. Number with original root number and a suffix letter starting with "A" on a (new) duplicate transmittal form.
 - b. Do not increase the scope of any prior transmittal.
 - c. Account for all components of prior transmittal.
 - 1) If items in prior transmittal received "A" or "B" Action code, list them and indicate "A" or "B" as appropriate.

- a) Do not include submittal information for items with prior "A" or "B" Action in transmittal.
 - 2) Indicate "Outstanding-To Be Resubmitted At a Later Date" for any prior "C" or "D" Action item not included in resubmittal.
 - a) Obtain Engineer's prior approval to exclude items.
 5. For 8-1/2 x 11 IN size sheets, provide three (3) copies of each page for Engineer plus the number required by the Contractor. The number of copies required by the Contractor will be defined at the Preconstruction Conference, but shall not exceed 5.
 6. For items not covered in Paragraph 1.4A.5., submit one reproducible transparency or camera-ready quality print and one additional print of each drawing until approval is obtained. Utilize mailing tube; do not fold. The Engineer will mark and return the reproducible to the Contractor for his reproduction and distribution.
 7. Provide clear space (3 IN SQ) for Engineer stamping of each component defined in 1.4-A.4.
 8. Contractor shall not use red color for marks on transmittals. Duplicate all marks on all copies transmitted, and ensure marks are photocopy reproducible. Outline Contractor marks on reproducible transparencies with a rectangular box.
 9. Transmittal contents:
 - a. Coordinate and identify Shop Drawing contents so that all items can be easily verified by the Engineer.
 - b. Identify equipment or material use, tag number, drawing detail reference, weight, and other project specific information.
 - c. Provide sufficient information together with technical cuts and technical data to allow an evaluation to be made to determine that the item submitted is in compliance with the Contract Documents.
 - d. Submit items like equipment brochures, cuts of fixtures, product data sheets or catalog sheets on 8-1/2 x 11 IN pages. Indicate exact item or model and all options proposed.
 - e. Include legible scale details, sizes, dimensions, performance characteristics, capacities, test data, anchoring details, installation instructions, storage and handling instructions, color charts, layout drawings, parts catalogs, rough-in diagrams, wiring diagrams, controls, weights and other pertinent data. Arrange data and performance information in format similar to that provided in Contract Documents. Provide, at minimum, the detail provided in the Contract Documents.
 - f. If proposed equipment or materials deviate from the Contract Drawings or Specifications in any way, clearly note the deviation and justify the said deviation in detail in a separate letter immediately following transmittal sheet.
- B. Samples:
1. Identification:
 - a. Identify sample as to transmittal number, manufacturer, item, use, type, project designation, tag number, Standard Specification section or drawing detail reference, color, range, texture, finish and other pertinent data.

- b. If identifying information cannot be marked directly on sample without defacing or adversely altering samples, provide a durable tag with identifying information securely attached to the sample.
2. Include application specific brochures, and installation instructions.
3. Provide Contractor's stamp of approval on samples or transmittal form as indication of Contractor's checking and verification of dimensions and coordination with interrelated work.
4. Resubmit samples of rejected items.

1.5 ENGINEER'S REVIEW ACTION

A. Shop Drawings and Samples:

1. Items within transmittals will be reviewed for overall design intent and will receive one of the following actions:
 - a. A - FURNISH AS SUBMITTED.
 - b. B - FURNISH AS NOTED (BY ENGINEER).
 - c. C - REVISE AND RESUBMIT.
 - d. D - REJECTED.
 - e. E - ENGINEER'S REVIEW NOT REQUIRED.
2. Submittals received will be initially reviewed to ascertain inclusion of Contractor's approval stamp. Drawings not stamped by the Contractor or stamped with a stamp containing language other than that specified in Paragraph 1.3A.4.a., will not be reviewed for technical content and will be returned without any action.
3. Submittals returned with Action "A" or "B" are considered ready for fabrication and installation. If for any reason a submittal that has an "A" or "B" Action is resubmitted, it must be accompanied by a letter defining the changes that have been made and the reason for the resubmittal. Destroy or conspicuously mark "SUPERSEDED" all documents having previously received "A" or "B" Action that are superseded by a resubmittal.
4. Submittals with Action "A" or "B" combined with Action "C" (Revise and Resubmit) or "D" (Rejected) will be individually analyzed giving consideration as follows:
 - a. The portion of the submittal given "C" or "D" will not be distributed (unless previously agreed to otherwise at the Preconstruction Conference). One copy or the one transparency of the "C" or "D" drawings will be marked up and returned to the Contractor. Correct and resubmit items so marked.
 - b. Items marked "A" or "B" will be fully distributed.
 - c. If a portion of the items or system proposed are acceptable, however, the major part of the individual drawings or documents are incomplete or require revision, the entire submittal may be given "C" or "D" Action. This is at the sole discretion of the Engineer. In this case, some drawings may contain relatively few or no comments or the statement, "Resubmit to maintain a complete package." Distribution to the Owner and field will not be made (unless previously agreed to otherwise).
5. Failure to include any specific information specified under the submittal paragraphs of the specifications will result in the submittal being returned to the Contractor with "C" or "D" Action.

6. Transmittals of submittals which the Engineer considers as "Not Required" submittal information, which is supplemental to but not essential to prior submitted information, or items of information in a transmittal which have been reviewed and received "A" or "B" Action in a prior submittal, will be returned with Action "E. Engineer's Review Not Required."
7. Samples may be retained for comparison purposes. Remove samples when directed. Include in bid all costs of furnishing and removing samples.
8. Approved samples submitted or constructed, constitute criteria for judging completed work. Finished work or items not equal to samples will be rejected.

END OF SECTION

Shop Drawing Transmittal No. -
 (Spec Section) (Series)

Project Name: 41 st Street Bridge Replacement Project		Date Received:			
Project Owner: City of Sioux Falls		Checked By:			
Contractor: HDR Engineering, Inc.		Log Page:			
Address: 6300 S. Old Village Place Suite 100 Sioux Falls, SD 57108		HDR No.: 111395			
Attn: Mr. Steve Hoff, PE		Drawing/Detail No.:			
Date Transmitted:		Previous Transmittal Date:			
Item No.	No. Copies	Description	Manufacturer	Mfr/Vendor Dwg or Data No.	Action Taken*
Remarks:					

* The Action Designated Above is in Accordance with the Following Legend:

- | | |
|--|--|
| <p>A - Furnish as Submitted</p> <p>B - Furnish as Noted</p> <p>C - Revise and Submit</p> <ol style="list-style-type: none"> 1. Not enough information for review. 2. No reproducibles submitted. 3. Copies illegible. 4. Not enough copies submitted. 5. Wrong sequence number. 6. Wrong resubmittal number. 7. Wrong spec. section. 8. Wrong form used. 9. See comments. | <p>D - Rejected</p> <p>E - Engineer's review not required</p> <ol style="list-style-type: none"> 1. Submittal not required. 2. Supplemental Information. Submittal retained for informational purposes only. 3. Information reviewed and approved on prior submittal. 4. See comments. |
|--|--|

Comments:

Distribution:	Contractor <input type="checkbox"/>	File <input type="checkbox"/>	Field <input type="checkbox"/>	Owner <input type="checkbox"/>	Other <input type="checkbox"/>
				DJ Buthe- City Hall	
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Section 02513
Special Provision for Cured-in-Place Pipe
PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes sewer pipe rehabilitation using cured-in-place pipe (CIPP) including all labor, materials, and equipment necessary to complete the Work as specified herein.
- B. Related Sections include but are not necessarily limited to:
 - 1. Section 02560-Internal Inspection of Pipelines.
 - 2. Section 02562-Sewer Pipe and Structure Cleaning.
 - 3. Section 02702 – Acceptance Testing for Sewers and Manholes.

1.2 QUALITY ASSURANCE

- A. Reference Standards:
 - 1. ASTM D570-Standard Test Method for Water Absorption of Plastics.
 - 2. ASTM D638-Standard Test Method for Tensile Properties of Plastics.
 - 3. ASTM D695-Standard Test Method for Compressive Properties of Rigid Plastics.
 - 4. ASTM D790-Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
 - 5. ASTM D1042-Standard Test Method for Linear Dimensional Changes of Plastics Under Accelerated Service Conditions.
 - 6. ASTM F1216-Standard Practice for Rehabilitation of Existing Pipelines and Conduits by The Inversion and Curing of a Resin-Impregnated Tube.
 - 7. ASTM F1743-Standard Practice for Rehabilitation of Existing Pipelines by Pulled-in-place Installation of Cured-in-Place Thermosetting Resin Pipe (CIPP).
 - 8. ASTM F2304-Standard Practices for Rehabilitation of Sewers Using Chemical Grouting.
 - 9. ASTM D2990-Standard Test Methods for Tensile, Compressive, and Flexural Creep and Creep-Rupture of Plastics.
 - 10. ASTM D3574-Standard Test Methods for Flexible Cellular Materials – Slab, Bonded and Molded Urethane Foams.

1.3 SUBMITTALS

- A. Make submittals in accordance with the required submittal procedures.
- B. Detailed short and long-term properties (including all supporting third-party test data) of all component materials.
- C. Structural calculations for each CIPP liner as defined in subsection 2.2, paragraph A.7, including size, ovality, ground water height, recommended thicknesses, and other factors used to design the CIPP in each segment.
- D. Cured liner property test data as defined in subsection 2.2, paragraph A.4 for cured CIPP product.
- E. CIPP end seal and connection sealing/lining materials, methods and equipment.
- F. Recommendations for material storage and temperature control.

- G. CIPP manufacturer's recommended handling, installation, curing, trimming, finishing, and QA/QC procedures for all applications, including resin manufacturer's heating requirements.
- H. Detailed method for addressing CIPP sampling requirements including location and size of each sample, method of removal, method of liner repair, and chain of custody.
- I. Chemical Safety Plan: A safety plan for all hazardous chemicals used or expected to be onsite including resin, catalyst, cleaners and repair agents.
- J. Written warranties as required herein.
- K. Gap filler materials and application methods.
- L. Within two weeks of delivery to the project site, certification from CIPP manufacturer stating CIPP tube has been manufactured in accordance with ASTM F1216 and/or ASTM F1743 and resin is suitable for its intended use.

1.4 CONTRACTOR QUALIFICATIONS

- A. CONTRACTOR performing the CIPP work shall comply with qualifications herein.
- B. Products and/or Installers seeking qualification must meet all of the following criteria to be deemed acceptable:
 - 1. The cured-in-place pipe manufacturing processes shall operate under a quality management system that is third-party certified to the latest ISO 9000 standards.
 - 2. For the manufacturer of the cured-in-place pipe product to be considered acceptable, a minimum of 1,000,000 linear feet of successful wastewater collection system installations in the United States must be documented to assure commercial viability. Documentation of compliance with this paragraph shall be submitted.
 - 3. For an installer of the cured-in place pipe to be considered as acceptable, the Installer must satisfy all insurance, financial, and bonding requirements of the OWNER, and must have had at least five (5) years of active consecutive experience in the commercial installation of the cured-in-place pipe product. In addition, the installer must have successfully installed at least 300,000 feet of the cured-in-place pipe product bid in wastewater collection systems. Documentation of compliance with this paragraph shall be submitted.
 - 4. The CIPP field superintendent shall have at least 5 years of experience installing CIPP systems as a superintendent plus at least 30,000 feet of pipe of 36" diameter and larger. Documentation of compliance with this paragraph shall be submitted.

1.5 BONDED WARRANTY

- A. The CONTRACTOR shall provide a Guaranty Bond. The bond shall cover mobilization, material costs and the labor costs associated with installing the approved liner. The bond shall also be unconditional in nature covering any type of failure of the materials, workmanship or incorrect installation of the approved liner and agreeing to repair or replace it at no cost to the OWNER at any point during the four-year correction period.

- B. The CONTRACTOR shall also provide a four-year written warranty from the liner manufacturer for the entire liner system, including all labor costs, repair material, defect fillers, primers, and the liner composite.
- C. Liner failure is defined as blistering, cracking, embrittlement, or softening.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Subject to compliance with the Contract Documents, the following Manufacturers are acceptable.
 - 1. Insituform Technologies, Inc. (CIPP)
 - 2. National Liner (CIPP)
 - 3. Neopoxy NPR-5300 series
 - 4. Or approved equal.

2.2 MATERIALS

- A. Cured-in-Place Pipe Liner:
 - 1. CIPP resin and fabric system meeting the requirements of ASTM F1216 or ASTM F1743.
 - 2. Use epoxy sealer on end seals.
- B. Component Properties
 - 1. Fabric Tubing:
 - a. The fabric tube shall be free from tears, holes, cuts, foreign materials and other surface defects.
 - b. The fabric tube material shall be designed for use in gravity sanitary sewers and shall be in strict conformance with all applicable sections of ASTM F1216, F2019 or a seamless version of F2019. The tube should be fabricated to a size that, when installed, will tightly fit the internal circumference and length of the original sewer pipe. Allowance should be made for circumferential stretching during the installation and shrinkage of resin.
 - 2. Resins:
 - a. The resin used shall be compatible with the CIPP system used, and designed for use in gravity sewers and high hydrogen sulfide environment. The resin shall be an unsaturated vinyl ester. Catalyst system compatible with the CIPP system shall be used that provides the cured physical strengths and properties specified herein.
 - b. Resins shall be tinted for adequate visibility suitable for internal inspection and provide positive indication of adequate liner wet-out.
 - 3. Chemical Resistance: The cured pipe shall be resistant to a variety of chemical effluents as described in ASTM D543.
 - 4. Cured CIPP Properties: The physical properties of the cured CIPP shall have minimum initial test values as defined in Table 1 of ASTM F1216 and supplemented below for polyester resin. Properties for the vinyl ester or any other enhanced resins shall be substantiated with third party test data.
 - a. Flexural strength: 4,500 psi per ASTM D790
 - b. Flexural modulus: 300,000 psi per ASTM D790
 - c. 50-year flexural creep modulus: 150,000 psi per ASTM D2990

5. CONTRACTOR shall submit 10,000-hour third party, 50-year flexural creep modulus test data. Test shall be in accordance with ASTM D-2990 at 10,000 hours or equal test as approved by the ENGINEER. If approved 10,000 hour tests are not available, CONTRACTOR shall use a minimum 50% reduction (50% retention) of flexural modulus of elasticity (per ASTM F1216) for all formula calculations.
6. Dimensions:
 - a. The CONTRACTOR shall make allowances in determining the felt tube length and circumference for stretch during installation and shrinkage during curing and aging. The minimum length shall be that which continuously spans the distance from the center of the inlet manhole to the center of the outlet manhole or as show and/or noted on the plans. The CONTRACTOR shall verify the lengths in the field before the liner tube is cut and impregnated. Individual installation runs may include one or more manhole-to-manhole sections as authorized by the ENGINEER.
 - b. The diameter of the existing pipes may be larger than nominal inside diameter due to corrosion. It is the CONTRACTOR's responsibility to determine the required diameter of the liner.
7. Design Criteria and Liner Thickness:
 - a. *The liner shall be designed in accordance with the procedures of ASTM F1216 or ASTM F1743, as appropriate and as modified below. All material properties used in design calculations shall be long-term (time-corrected) values.*
 - b. *The CONTRACTOR shall calculate and submit to the ENGINEER for review the required minimum thickness for the CIPP to be installed in each pipe reach based on the pipeline information shown on the project Drawings, internal inspection data, actual field conditions or assumptions, and the CIPP manufacturer's specifications. After award of contract, CONTRACTOR shall not order material until field verification of pipe sizes are performed and final design calculations are approved by the ENGINEER.*
 - c. *The following parameters shall be assumed for the liner design for bidding purposes only:*
 - 1) Modulus of soil reaction, E's = 700 psi (fully deteriorated).
 - 2) Unit weight of soil = 120 pcf.
 - 3) Live load using an AASHTO HS20 vehicle loading.
 - 4) The CIPP shall be designed for fully deteriorated conditions.
 - 5) Safety factor of 2.0.
 - 6) Ovality factor = 5%.
 - 7) Groundwater elevation:
 - a) See Soil Borings: The exact groundwater elevation near this segment of sanitary sewer is not known.
 - d. The wall thickness of the felt tube shall be ordered to the next standard 1.5 mm incremental thickness above the minimum calculated design thickness.
 - e. The nominal CIPP thickness shall be at least the calculated design thickness above, except where fabric layers overlap, in which case it may be in excess of this value.

- f. Unless otherwise specified to provide for excess resin migration, the gap thickness of the wetting out equipment shall be sized to allow an excess of 5 to 10 percent resin to pass during impregnation.
- g. *CIPP End Seals: Use epoxy sealing.*

PART 3 – EXECUTION

3.1 GENERAL

- A. The Contractor shall control infiltration of groundwater into the existing host sewer either by repair of all active leaks to the satisfaction of the Engineer or groundwater dewatering so as to prevent washout of the CIPP liner resin.
- B. Engineer shall be notified at least 24 hours in advance of lining operations.
- C. Sections of the existing host pipe that have shifted, dropped, or severely deteriorated, shall be ground down, grouted, or otherwise repaired to provide a smooth continuous surface for the CIPP installation that will not reduce the cross-sectional area of the interior of the relined pipe or reduce wall thickness to less than the minimum specified thickness. CONTRACTOR shall clear existing sewer of obstructions such as solids or collapsed pipe that will prevent CIPP installation.
- D. CONTRACTOR shall divert wastewater flows around the pipe to be lined prior to installation of CIPP liner.
- E. CONTRACTOR shall clean and inspect pipe prior to installation of CIPP (see Section 02560 and Section 02562).
- F. The CONTRACTOR shall be responsible for control of all material and process variables to provide a finished CIPP possessing the minimum properties specified in ASTM F1216 and ASTM F1743 and required herein.

3.2 STORAGE AND DELIVERY:

- A. The CONTRACTOR shall be responsible for the delivery, storage and handling of all materials for CIPP, pre-lining, and connection liners in accordance with the written requirements of the manufacturer.
- B. CONTRACTOR shall exercise adequate care during transportation, handling and installation to ensure the material is not torn, cut, or otherwise damaged.
- C. If any part or parts of the material becomes torn, cut or otherwise damaged before or during installation, it shall be repaired or replaced in accordance with the manufacturer's recommendations before proceeding further and at no additional cost to the OWNER.

3.3 INSTALLATION PROCEDURES

- A. Cured-in-place pipe liner:
 - 1. The CONTRACTOR shall designate the offsite location where the CIPP will be impregnated with resin ("wet-out"). Locations shall be subject to approval by the ENGINEER. The CONTRACTOR shall allow the ENGINEER to inspect the materials and "wet-out" procedure. Onsite or "over-the-hole" wet-outs are not permitted.
 - 2. The impregnated CIPP tube shall be transported to site under controlled environmental conditions. Transport vehicles shall include a tamper resistant, sealed temperature recording device that records the temperature of the liner

at all times after leaving the wet-out site. The CONTRACTOR shall decide when to transport the impregnated CIPP tube to site and when to commence insertion with respect to weather conditions.

3. Weather Conditions: No CIPP installations shall be undertaken in weather conditions that could jeopardize the installation of the CIPP, or be detrimental to the long-term performance of the CIPP.
 4. Method: The tube shall be impregnated with a liquid thermosetting resin and lowered into the insertion pit through an inversion tube. The inversion tube will then be installed using water to press the resin impregnated side firmly against the inside walls of the damaged pipe and apply adequate pressure to fully extend it to the downstream receiving point. The smooth coated side of the liner shall become the new interior surface of the pipe. The inversion pressure shall be appropriate to allow inversion over the full length of the pipe, produce dimples at side connections, and flare ends at the manholes. After the tube is inverted through the pipe section, the CONTRACTOR shall provide heat to the air or water to cause the resin to cure and avoid stress to the fabric.
 5. Curing and Cool Down:
 - a. The curing process shall follow a step cure or similar approach recommended by the manufacturer and approved by the ENGINEER, and shall be held at the top step for an adequate length of time to ensure that the design physical properties are attained. Circulation water shall cool down to at least 100 degrees F for 1 hour before releasing the hydrostatic head.
 - b. Water inversions: the water shall be evacuated from the pipe at a controlled rate to prevent negative pressure in the pipe.
 - c. The rate of temperature rise and fall during heating and cooling shall not exceed 2 degrees F per minute.
 - d. For CIPP liner thicknesses greater than 0.75 inch, or where the existing pipe, soil and groundwater combination is likely to provide a significant heat sink, affecting the temperature gradient across the CIPP liner material, the temperature of the exotherm process shall be monitored by remote temperature sensors placed at the interface of the existing pipe and the CIPP. A minimum of two temperature sensors shall be installed, one at either end of the length being lined.
 - e. The curing process shall not be terminated until the temperature sensor readings indicated that a satisfactory cure has been completed.
 - f. *Any extended cure times shall not adversely affect the properties of the CIPP lining material.*
- B. CIPP End Seals:
1. The CONTRACTOR shall secure the connections between the CIPP and host pipe. Epoxy sealant shall adequately bond with the host CIPP pipe per CIPP manufacturer's specifications.
 2. The CONTRACTOR shall furnish and install epoxy resin to CIPP liner end seal at all upstream and downstream ends of the CIPP liner to form a watertight seal.

3.4 FIELD QUALITY CONTROL

A. CIPP Samples and Testing:

1. Sampling Frequency: Sampling shall be performed for each separate installation of CIPP. As an example - one sample from each pipeline reach where the liner is installed will be provided.
2. CONTRACTOR shall prepare a sample of the installed CIPP liner for subsequent testing of its physical properties. The sample shall be prepared using the flat plate sampling method in accordance with the procedures in ASTM F1216 or ASTM F1743, as is applicable.
3. The flat plate sample shall be large enough to provide five sample specimens each for Short Term Flexural (Bending) properties, as per ASTM D790. The sample will be clamped in a mold and placed in the downtube during the curing of the CIPP tube.
4. The sample shall be removed after all the water is removed from the cured pipe tube. The samples shall be identified by: Date, Project Name, Size, Thickness, Resin and Catalyst. The cured sample shall be tested by an independent testing laboratory as recommended by the CIPP liner manufacturer and approved by the ENGINEER, for the bending properties as per ASTM D790. The sample shall be double bagged and sealed.
5. The CONTRACTOR shall provide liner test results for long-term properties in accordance with ASTM D2990.
6. The CONTRACTOR shall provide a delivery manifest for each liner with the following information:
 - a. Inversion manholes for either end of the installation.
 - b. Inversion location where the liner will be installed.
 - c. CONTRACTOR-assigned installation number.
 - d. Liner diameter, length, and thickness.
7. After the ENGINEER has confirmed that the liner is the correct product for the planned installation, CONTRACTOR shall prepare a Chain of Custody Form for the CIPP sample(s) to include the installation location, number and date when sample is removed and bagged, and a place for CONTRACTOR and OWNER's inspector to sign. A CIPP sample shall be taken for each installation. The Chain of Custody Form prepared by the CONTRACTOR and submitted to the ENGINEER for approval before any installations are performed. Thereafter, the Chain of Custody Form shall be provided to the ENGINEER at the time of each installation to document that the sample being sent for testing is from the inversion placed in the down tube for curing. After the CIPP sample has been cured and removed, the sample shall be labeled with the installation location and number. The completed and signed Chain of Custody Form shall be provided to the OWNER's inspector who will independently verify that the sample is the correct sample, has been properly bagged, and labeled for shipment. The OWNER's inspector will sign the Chain of Custody Form after verification. Copy of the delivery manifest and Chain of Custody Form shall be provided to the ENGINEER after all signatures are affixed and the sample is shipped to the laboratory. The ENGINEER will review all invoices to confirm that a request for a progress payment has the appropriate documentation on file before approving payment. No more than 50 percent may be invoiced for the installation until acceptance of the liner test results by the ENGINEER or OWNER's designated reviewer.
8. The CONTRACTOR shall be responsible for any deviation from the specified physical properties and those evaluated through testing. Failure to meet the

specified physical properties will result in the CIPP being considered defective work.

9. The CONTRACTOR shall be responsible for all costs associated with the testing of the liner physical properties. The CONTRACTOR shall submit all test results per Section 01340.

3.5 SEWER CONNECTION SEAL

- A. There are no existing lateral sewer connections.

3.6 FINISHED CIPP

- A. The finished CIPP shall be continuous over the entire length of a manhole-to-manhole section of pipe, or as shown or noted on the plans.
- B. Wrinkles in the finished CIPP that cause a backwater of one (1) inch or more are unacceptable. CONTRACTOR shall repair or replace that section of the pipe at no additional cost to the OWNER. Methods of repair shall be proposed by the CONTRACTOR and submitted to the ENGINEER for approval.
- C. Wrinkles in the finished CIPP that reduce the structural stability of the pipe are unacceptable. CONTRACTOR shall repair or replace that section of the pipe at no additional cost to the OWNER. Methods of repair shall be proposed by the CONTRACTOR and submitted to the ENGINEER for approval.
- D. If a void between the wrinkle and the existing pipe wall exists, the CONTRACTOR shall repair or replace that section of the pipe at no additional cost to the OWNER. Methods of repair shall be proposed by the CONTRACTOR and submitted to the ENGINEER for approval.
- E. Defects such as foreign inclusions, dry spots, lifts, pinholes, delamination, and wrinkling beyond the specification allowances, as determined by the ENGINEER as affecting the integrity or strength of the CIPP, or as adversely affecting the hydraulic capacity of the pipe, shall be repaired or replaced. CONTRACTOR shall repair or replace that section of the pipe at no additional cost to the OWNER. Methods of repair shall be proposed by the CONTRACTOR and submitted to the ENGINEER for approval.

3.7 ACCEPTANCE

- A. Perform internal inspection of CIPP (see Section 02560) after all connection sealing and provide inspection data to ENGINEER.
- B. Perform internal inspection of connection seals. Provide inspection data to ENGINEER.

3.8 CLEAN UP

- A. Following inspection, the CONTRACTOR shall clean up the entire project area. All excess material and debris, not incorporated into the permanent installation, shall be disposed off-site by the CONTRACTOR.

END OF SECTION

Section 02560
Internal Inspection of Pipelines
PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. This specification defines the requirements for internal inspection of the existing sewer pipelines indicated for rehabilitation on the Drawings before rehabilitation work using internal inspection methods such as closed-circuit television (CCTV) inspection or digital scanning and evaluation technology (DSET).
 - 2. All pipes shall be inspected after installation of the CIPP and installation and sealing and final cleaning.
- B. Related Sections include but are not necessarily limited to:
 - 1. Section 02513 – Cured-in-Place Pipe.
 - 2. Section 02562-Sewer Pipe and Structure Cleaning.

1.2 QUALITY ASSURANCE

- A. Reference Standards:
 - 1. NASSCO PACP Coding Manual.
- B. Quality Control Submittals
 - 1. Qualification References: Contact names and telephone numbers.
 - 2. List of staff and equipment.
 - 3. NASSCO PACP certifications.
 - 4. Look-ahead inspection schedules, one week in advance of Work.

1.3 SUBMITTALS

- A. Make submittals in accordance with the required submittal procedures.
- B. Shop Drawings: Catalog and manufacturer's data sheets for inspection equipment.
- C. Field Data Acquisition System: User's manual and office copy of the software for the field data entry system to be used to provide electronic data files. System shall be certified for NASSCO PACP Coding System. Provide to the ENGINEER prior to the start of internal inspection work.
 - 1. CUES Granite XP Software.
- D. Completed Internal Inspection Records
 - 1. Internal inspections shall be completed at the following times:
 - a. *Prior to CIPP lining.*
 - b. *After CIPP lining and installation and sealing of connections and final cleaning.*

1.4 USE OF INSPECTION RECORDS

- A. Internal inspection data will be used by the CONTRACTOR, and verified by the ENGINEER, to confirm the rehabilitation technique proposed for pipes to be rehabilitated. Internal inspection data may be used for the following:
 - 1. Cleaning prior to rehabilitation.

2. Identification of pipeline condition that makes rehabilitation unsuitable and requires the pipe be repaired.
3. Establish the size and location of lateral sewer where a connection liner will be installed after pipe lining.
4. Confirm pipeline diameters, ovality factors, bypass requirements, and other information as may be required by CONTRACTOR to complete rehabilitation.
5. Final acceptance.

1.5 CONTRACTOR QUALIFICATIONS

- A. The CONTRACTOR shall be qualified or shall have a qualified independent company specializing in internal inspections to inspect the sewer interior using a color camera and providing required documentation.
- B. The CONTRACTOR shall be responsible for properly inspecting the pipe, or providing approval of the finished inspection video.
- C. The CONTRACTOR shall have performed work successfully for at least three other projects, within the last five years, with pipe lengths and pipe diameters similar to this Work.
- D. The Crew Chief designated by the CONTRACTOR shall have worked on other projects similar to this Work and shall be experienced using the equipment proposed for this Work.
- E. Field operator(s) must have current National Association of Sewer Service Companies (NASSCO) Pipeline Assessment and Certification Program (PACP) Certification.

PART 2 – PRODUCTS

2.1 INSPECTION EQUIPMENT

- A. Equipment to operate inside the pipe including, but not limited to, cables, power source, lights, and camera shall be operative in 100 percent humidity conditions.
- B. Support equipment including, but not limited to, monitor, footage counter, winches, rewinders, and computer, recording instruments located above-ground suitable to inspection work.
- C. Camera:
 1. Camera shall be nationally-recognized testing laboratory (NRTL) certified for a normal sewer environment when gas meter readings of the manhole airspace indicate an LEL less than 10 percent and shall be explosion proof certified for hazardous environment when gas meter readings of the manhole environment indicate an LEL greater than 10 percent.
 2. Resolution: 350 lines per inch, minimum, color image.
 3. Pan and tilt unit, with adjustable supports specifically designed and constructed for operation in connection with pipe inspection.
 4. 65-degree viewing angle, minimum and automatic or remote focus and iris controls.
 5. Skid mounts, sized for each pipe diameter, or self propelled.
 6. Equipped with tag line suitable for pulling camera backwards.
 7. Automatic or remote-controlled tint and brightness balance adjustments.
- D. Camera Lighting:

1. Minimize reflection.
 2. Sufficient for diameters from 48 to 54 inches.
 3. Provide clear view of entire inside periphery of pipe.
 4. Adjustable through range from 4 inches to infinity.
- E. Remote Reading Footage Counter
1. Calibration: each day prior to start of work using walking meter, roll-a-tape, or other suitable device.
 2. Accurate to plus or minus 2/10ths of a foot over 1,000 feet of pipe inspected.

2.2 RECORDING MEDIUM

- A. The inspection shall be recorded, stored and submitted on DVD's or external hard drive in high quality MPG format on disks formatted for use with PC systems. The audio portion of the composite disc shall be sufficiently free from electrical interference and background noise to provide complete intelligibility of the oral report.

PART 3 – EXECUTION

3.1 GENERAL

- A. ALWAYS record pipe identification by upstream manhole (or concrete collar) first and downstream manhole (or concrete) second, including reverse setups. If report format has starting and ending manhole, always use upstream and downstream manhole instead of starting and ending manhole. Any inspection report that does not provide the manholes in this order will be rejected manhole also may refer to concrete collars.
- B. Defect Coding: National Association of Sewer Service Companies (NASSCO) Pipeline Assessment and Certification Program (PACP) coding system, latest version, shall be used to document all defects visible on the image recordings.
- C. The camera shall be pulled through the sewer in the downstream direction. If the pipe is partially televised due to an unavoidable obstruction in the pipeline, then inspection will be provided in the upstream direction, against the flow, and both segments must be submitted together on the same CD.
- D. Line segments shall be televised complete from structure to structure in a continuous run. Image stream must clearly show the camera starting and ending at the upstream and downstream structures, unless a defect(s) does not allow it. Do not record partial televising of a segment and then record another partial run on another CD.
- E. Pipe defects shall be recorded, in addition to any location determined not to be clean, part of a proper liner installation, or liner defects (including, but not limited to, bumps, folds, tears, dimples, etc.).
- F. Project Hold Point is required after initial post internal inspection while ENGINEER reviews inspection submittal and approves in order to proceed to connection work and post connection sealing internal inspection. Submit in accordance with Section 01340. Flow bypassing shall be maintained until acceptance of initial post internal inspection submittal by ENGINEER.

3.2 INSPECTION RATE

- A. Maximum rate of travel shall be 30 feet per minute when recording. The camera shall be stopped for a minimum of 5 seconds at each pipe defect.

3.3 REQUIRED FIELD IN HEADER FILE

- A. Opening Screen Fields: according to PACP format standards and valid codes and as amended below:
 1. Operator's Name
 2. PACP Certificate No.
 3. Sheet No.
 4. Date
 5. Street Name and Number
 6. City Name (where work is being performed, use county name if not within city limits)
 7. Upstream Manhole Number
 8. Downstream Manhole Number
 9. Direction of Survey (reverse or downstream only)
 10. Size 1 (diameter of round pipe, or wide of other shape)
 11. Size 2 (not used for round pipe, or height of other shape)
 12. Shape
 13. Material
 14. Disc/media number (unique number for every disc on the project e.g. date - # or 110206-1 or 110206-2)
 15. Pre-cleaning
 16. System Owner
 17. Survey Customer
 18. Drainage Area (subbasin number or interceptor name)
 19. Purchase Order No. (or work order number if in-house crews)
 20. Pipe Segment Reference (GIS) (use if available on GIS map)
 21. Time
 22. Upstream Rim to Invert Elevation
 23. Upstream Rim to Grade
 24. Downstream Rim to Invert Elevation
 25. Downstream Rim to Grade
 26. Use of Sewer
 27. Lining Method
 28. Total Length of Pipe (from drawings center of manhole upstream to center of manhole downstream)
 29. Total Length Surveyed (from inspection edge of upstream manhole to edge of downstream manhole)
 30. Purpose of Survey
 31. Additional Information (complete for "other" code used in previous fields)

3.4 RECORDING

- A. Set the camera so that axis is as close to centerline of pipe as possible.
- B. Provide a 360-degree view of the pipe interior when moving forward.

- C. Keep camera lens clean and clear. If material or debris obscures image and reduces visibility, clean or replace lens prior to proceeding with inspection.
- D. Camera lens may submerge only while passing through clearly-identifiable line sags (or vertical misalignments).
- E. Lighting intensity shall be remote controlled and shall be adjusted to minimize reflective glare. Lighting and camera quality shall provide a clear, in-focus image of the inside periphery of the sewer.
- F. The system of cabling employed to transport the camera and transmit its signal shall not obstruct the camera's view.
- G. Pipe defects according to NASSCO PACP standards shall be recorded, in addition to any location determined not to be clean, part of a proper liner installation, or liner defects (including, but not limited to, bumps, folds, tears, dimples, etc.).
- H. Record inside view of each lateral connection.
- I. Loss of color or severe red or green color will be cause for rejection of inspection.
- J. Record in English units.
- K. Continuous Footage Readings:
 - 1. Visible on image at all times.
 - 2. Record defect locations to the nearest one-half foot (e.g. 2.5 feet).
 - 3. Line segment recording will be rejected if continuous footage meter is inaccurate, not visible, or leave doubt as to the total length of pipe inspected.
- L. Loss of vertical hold will constitute a cause for rejection.
- M. Do not include defect codes on image at any time.
- N. Opening Screen
 - 1. Failure to provide opening screen with correct information will result in the rejection of the entire pipe segment inspected.
 - 2. The opening screen should include, at a minimum:
 - a. *Owner's Name: City of Sioux Falls, South Dakota.*
 - b. *Project Title: Central Main Replacement Phase III Segment 1 – NSP Substation to Spillway.*
 - c. *Date of Inspection: month/day/year.*
 - d. *Number manholes as directed by Owner.*
 - e. *Pipe Size: in inches. Use calipers or measuring rod to verify diameter of inlet and outlet pipes in manholes.*
 - f. *Pipe Material: using standard NASSCO PACP codes.*
 - g. *Inspection Direction: Normal (upstream to downstream) or reverse (downstream to upstream).*
 - 3. Continuous View
 - a. Include current distance along pipe segment (counter footage).
 - b. Do not include pipe structure identification number along active image (only on opening screen).
 - 4. Audio Commentary
 - a. Description of inspection setup, including related information from opening screen
 - b. Unusual conditions.
 - c. Do not provide audio at any time in a way that characterizes defect.

3.5 INSPECTION RECORDS

A. Electronic Inspection Report

1. Electronic Format: Electronic file shall be consecutively numbered and labeled and submitted to the ENGINEER on a weekly basis. The ENGINEER will review to make sure that the required information is provided and the recording is of acceptable quality. If the ENGINEER determines that the disc is defective or not of adequate quality, the CONTRACTOR shall inspect again at no additional cost to the OWNER.
2. Complete one inspection record for each manhole-to-manhole section of pipe.
3. Provide separate records for normal and reverse setups of same segment.
4. Originals shall be maintained onsite throughout Project and copy shall be submitted to ENGINEER at end of each week.
5. Access based electronic file of all inspection data to be provided.
6. CONTRACTOR shall maintain a copy of all inspection documentation (CD's and databases) for the duration of the work and warranty period.

B. Electronic Disc Labeling

1. Provide typed label on disc and that indicates the following:
 - a. Name OWNER: City of Sioux Falls, South Dakota.
 - b. Project Title: Central Main Replacement Phase III Segment 1 – NSP Substation to Spillway.
 - c. Date of Inspection: month/day/year.
 - d. Inspection company.
 - e. Disc Number: do not duplicate numbers at any time during the inspection work.

C. Still Image:

1. Provide whenever defect is encountered that interrupts completion of inspection (i.e., collapsed pipe, deformed pipe, severe offset joints, heavy debris or roots).
2. Provide typed label on front of photograph with upstream and downstream identification numbers, footage (if not visible on photograph), and defect type.

D. Written Inspection Summary:

1. Prepare one page summary for each week's submittal with electronic submittal and include:
 - a. Summary of discs clearly indicating which pipe segments are on each disc and include:
 - 1) Upstream and Downstream Structure
 - 2) Reverse or Normal Setup
 - 3) Pipe Size
 - 4) Pipe Length (feet)
 - 5) Inspected Length (feet)
 - 6) Date Inspected
 - b. Summary of still images: Upstream and downstream manhole numbers, footage where image was taken, description of what image is showing.

3.6 DRAWING CORRECTIONS

- #### A. Inventories or maps shall be corrected to reflect actual field conditions and corrections shall be incorporated into the as-built drawings.

- B. Verify pipe material, diameter and surface lengths between manholes.

3.7 QUALITY ASSURANCE

- A. The ENGINEER will review inspection data to ensure compliance with the requirements listed of the Contract Documents. If, in the opinion of the ENGINEER, the inspection is not acceptable, reinspection will be completed by the CONTRACTOR at no additional cost to the OWNER.
- B. The CONTRACTOR shall be responsible for modifications to his equipment and/or inspection procedures to achieve report material of acceptable quality. No work shall commence prior to approval of the material by the ENGINEER. Once accepted, the report material shall serve as a standard for the remaining work.

END OF SECTION

SECTION 02562
SEWER PIPE AND STRUCTURE CLEANING
PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. This section specifies the requirements for cleaning of the sewer pipes and structures prior to rehabilitation. Work for cleaning consists of furnishing all labor and equipment to remove and dispose of the accumulated sediments in sewer pipes and structures located within the project limits.
2. Cleaning is required prior to installation of cured-in-place pipe (CIPP) in the existing pipelines.
3. Cleaning is required after installation of CIPP lining.

B. Related Sections include but are not necessarily limited to:

1. Section 02513 – Cured-in-Place Pipe.
2. Section 02560-Internal Inspection of Pipelines.
3. Section 02802-Temporary Sewage Diversion Pumping and Flow Control.

1.2 QUALITY ASSURANCE

A. Quality Assurance.

1. No chemicals shall be used to clean the sewer without prior written authorization of the ENGINEER. In no case shall any chemical additive be used that might be considered hazardous, or considered detrimental to organisms or equipment at the wastewater treatment plant, or detrimental to old or new pipe materials.
2. The CONTRACTOR shall be solely responsible for reviewing available records (see Supplemental Information) and assessing the existing facilities to determine the expected quantity of sediments, debris, grease, scale, encrustations, and roots to be removed by the cleaning process selected by the CONTRACTOR to comply with the requirements of this Section.

1.3 SUBMITTALS

A. Make submittals in accordance with the required submittal procedures.

B. A letter identifying the equipment and the methods the CONTRACTOR plans to employ to remove sediment, debris, grease, scale, encrustations, and roots from the sewer pipes and structures. The letter shall include:

1. Detailed explanation of the entire cleaning process including removal and disposal of debris.
2. Schedule of activities.
3. References where the CONTRACTOR has used the identified cleaning method successfully within the past three (3) years.
4. List of actions planned to mitigate impact to the public during the cleaning operation.

C. The CONTRACTOR shall submit documentation certifying the safe transport of material removed from the project sewers.

PART 2 - PRODUCTS

2.1 EQUIPMENT

- A. Equipment shall be capable of removing dirt, grease, rocks, sand, roots, and obstructions from pipelines and manholes.
- B. High-Velocity, Hydro Cleaning Equipment:
 - 1. High-Pressure Hose: 700 feet minimum.
 - 2. Hydraulically driven hose reel.
 - 3. High Velocity Nozzle
 - a. Appropriate for the condition of the pipe or manhole to avoid structure failure.
 - b. Two minimum.
 - c. Capable of producing scouring action from 10 degrees to 45 degrees in lines to be cleaned.
 - 4. High-velocity Gun: Capable of producing flows ranging from fine spray to long distance solid stream.
 - 5. Water Tank: 1,000-gallon storage minimum.
 - 6. Auxiliary engines and pumps.
 - 7. Equipment Operating Controls: Locate above ground.
 - 8. Working Pressure: Minimum 2,000 pounds per square inch at 35 gallons per minute.
- C. Mechanically-powered Equipment
 - 1. Bucket Machine:
 - a. Furnish with buckets in pairs, and with sufficient dragging power to perform work efficiently.
 - b. Use V-belts for power transmission or have overload device. No direct drive machines permitted.
 - c. Equip with take-up drum and minimum 700 feet of cable.

PART 3 - EXECUTION

3.1 GENERAL

- A. The CONTRACTOR shall at all times conduct work to prevent any blockage or failure and minimize surcharging in the sewer structures, connecting pipelines, and service laterals. Damage to existing facilities as a result of the CONTRACTOR's work shall be promptly repaired in kind at no additional cost to the OWNER.
- B. When using hydraulically propelled cleaning tools that depend on water pressure to provide cleaning force, or tools that retard flow are used, take precautions to ensure that water pressure created does not damage or cause flooding of public or private property.
- C. The CONTRACTOR shall be thoroughly familiar with all phases of sewer pipe and structure cleaning to ensure the completion of this Contract without causing a health hazard or damage to the sewage system, public, and private properties.

3.2 PIPELINE CLEANING

- A. The CONTRACTOR shall clean existing sediment, debris, scale, encrustations, and grease accumulations from the pipelines to be lined and adequately prepare the surfaces for rehabilitation methods suitable for the type and volume of material to be removed.

- B. Pipe cleaning shall restore pipe to a minimum of 98 percent of original carrying capacity. No more than 2 percent debris, based on visual observation documented by internal inspection, shall remain in the pipe.
- C. When using hydro-cleaning equipment for pipes, make minimum of two passes through pipe segment. During final cleaning, make a minimum of one pass through the pipe segment.
- D. Begin pipe cleaning at upstream end of reach and proceed in downstream direction.
- E. Supply water for performing high-velocity hydro cleaning or flushing:
 - 1. Potable water will be available to Contractor from existing City of Sioux Falls hydrants. Contractor shall make arrangements and pay associated costs for use of potable water through the City of Sioux Falls. Provide and maintain required facilities for use of water.

3.3 DISPOSAL OF SEDIMENTS

- A. Any sediment or debris from cleaning operations larger than U.S. #8 sieve shall not be deposited downstream in the sewer main. Sedimentation deposit downstream, as determined by the ENGINEER, shall be removed at no additional cost to the OWNER.
- B. All materials dislodged during cleaning shall be removed from the work area and transported to an approved disposal site.
- C. Remove sediments and material from cleaning operation at the end of each workday.
- D. If debris volumes in the pipeline are too large to remove with hydraulic jet cleaning equipment, cleaning shall be performed by the CONTRACTOR using a bucket machine.
- E. The CONTRACTOR shall be responsible for transporting and disposing, including all disposal fees, of any sediments and material removed from the sewer or structures. Off-site disposal of all material removed from the sewer shall be the CONTRACTOR's responsibility.
- F. Hauling containers shall be watertight and shall be certified for transport of this material.
- G. On-site stockpiling of removed material will not be permitted.
- H. The CONTRACTOR is responsible for obtaining all necessary permits and approval and paying fees from all regulatory agencies required to perform the work, including transport of sediments. Submit all permits to the ENGINEER per Section 01340.

3.4 VERIFICATION OF CLEANING

- A. CONTRACTOR shall demonstrate to ENGINEER results of cleaning effort before any other work is allowed. Visual verification shall be made by the ENGINEER to determine acceptance of cleaning. Reclean pipeline segment or manhole if ENGINEER determines that cleaning is not adequate.

END OF SECTION

SECTION 02702
ACCEPTANCE TESTING FOR SEWERS
PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes
 - 1. This specification describes the requirements for acceptance testing of rehabilitated sanitary sewers.
 - 2. All rehabilitated sanitary sewers shall be visually inspected for defects and leaks. All observable leaks and defects shall be corrected.
 - 3. Contractor shall be responsible for all temporary sewage diversion pumping and flow control; cleaning; internal inspection of rehabilitated sanitary sewers and any corrections required.
 - 4. Additional criteria for acceptance is provided in Section 02513.
- B. Related Sections include but are not necessarily limited to:
 - 1. Section 02513 – Cured-in-Place Pipe.
 - 2. Section 02560 – Internal Inspection of Pipelines.
 - 3. Section 02562 – Sewer Pipe and Structure Cleaning.
 - 4. Section 02802 – Temporary Sewage Diversion Pumping and Flow Control.

1.2 SUBMITTALS

- A. Submittals shall conform to requirements of Section 01340 for Submittals.
- B. Internal Inspection Plan: Before internal inspection begins and in adequate time to obtain approval through the submittal process, prepare and submit an internal inspection plan for approval by Engineer. Include testing procedures, methods, and tentative schedule.
- C. Internal Inspection Records: Submit internal inspection records on each segment of rehabilitated sanitary sewer and new manholes.

PART 2 - PRODUCTS

2.1 INTERNAL INSPECTION EQUIPMENT

- A. Internal inspection equipment shall be as specified in Section 02560-Internal Inspection of Pipelines.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Contractor shall provide temporary diversion pumping as required for internal inspection.
- B. Contractor shall provide cleaning of the rehabilitated sewer pipe and new manholes as required for internal inspection.
- C. Shut-off dewatering system, if required, prior to beginning internal inspection and allow adequate time for groundwater level to stabilize.

3.2 INTERNAL INSPECTIONS

- A. Perform internal inspections under the observation of the Engineer.

- B. Submit internal inspection records to Engineer as required.
- C. Correct all observable leakage and defects in rehabilitated sewers as required.

END OF SECTION

SECTION 15078
PIPE – FIBERGLASS REINFORCED POLYMER MORTAR PIPE
PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Centrifugally Cast Fiberglass Reinforced Polymer Mortar Pipe. (CCFRPM)

1.2 QUALITY ASSURANCE

A. Referenced Standards:

1. Centrifugally Cast Fiberglass Reinforced Polymer Mortar Pipe (CCFRPM):
 - a. ASTM International (ASTM):
 - 1) D3262, Standard Specification for “Fiberglass” (Glass-Fiber-Reinforced Thermosetting-Resin) Sewer Pipe.
 - 2) D4161, Standard Specification for “Fiberglass” (Glass-Fiber-Reinforced Thermosetting-Resin) Pipe Joints Using Flexible Elastomeric Seals.
 - 3) D2412, Standard Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading.

1.3 SUBMITTALS

A. Provide each pipe, fitting, special appurtenance with a plainly and permanently waterproofed, marked identification. Include but not necessarily limit markings to the following:

1. Stiffness Class.
2. Date of manufacture.
3. Manufacturer's trademark.
4. Manufacturer's name.
5. Full details on fittings and pipe schedule regarding angles of change, reduction.
6. Special notations and tagging of special items in regard to line location.

B. Shop Drawings:

1. See Section 01340.
2. Product technical data including:
 - a. Acknowledgement that products submitted meet requirements of standards referenced.
 - b. Manufacturer's installation instructions.
 - c. Joint details.
 - d. Connection details.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Resin Systems:

1. The Manufacture shall use only polyester resin systems with a proven history of performance in this particular application. The historical data shall have been acquired from a composite material of similar construction and composition as the proposed product.

- B. Glass Reinforcement:
 - 1. The reinforcing glass fibers used to manufacture the components shall be of highest quality commercial grade E-glass filaments with binder and sizing compatible with impregnating resins. Maximum length of glass fiber material shall not exceed 2-1/2 IN.
- C. Silica Sand:
 - 1. Sand shall be minimum 98% silica with a maximum moisture content of 0.2%.
- D. Additives:
 - 1. Resin additives, such as curing agents, pigments, dyes, fillers, thixotropic agents, etc., when used, shall not detrimentally effect the performance of the product.
- E. Elastomeric Gaskets: ASTM F477, Section 6.9.1, oil-resistant gasket; Type A durometer; polymer shall be nitrile (MBR; acrylonitrile butadiene) elastomer. Natural rubber will not be acceptable.

2.2 MANUFACTURE AND CONSTRUCTION

- A. Pipes:
 - 1. Manufacture pipe by the centrifugal casting process to result in a dense, non-porous, corrosion-resistant, consistent composite structure. Maximum void content not to exceed 0.2%.
- B. Joints:
 - 1. Unless otherwise specified, the pipe shall be field connected with fiberglass sleeve couplings that utilize elastomeric sealing gaskets made as the sole means to maintain joint watertightness. The joints must meet the performance requirements of ASTM D4161. Joints at tie-ins, when needed, may utilize fiberglass, gasket-sealed closure couplings.
- C. Fittings:
 - 1. Flanges, elbows, reducers, tees, wyes, laterals and other fittings shall be capable of withstanding all operating conditions when installed. They may be contact molded or manufactured from mitered sections of pipe joined by glass-fiber-reinforced overlays.
- D. Acceptable Manufacture:
 - 1. HOBAS Pipe USA, Inc.
 - 2. Approved equal.

2.3 DIMENSIONS

- A. Diameters:
 - 1. The actual outside diameter (18" to 48") of the pipes shall be in accordance with ASTM D3262. For all other diameters, OD's shall be per manufacture's literature. OD's shall be within 0.1% throughout the entire pipe length to allow for field fabrication.
- B. Lengths:
 - 1. Pipe shall be supplied in nominal lengths of 5, 10, or 20 feet. Actual laying length shall be nominal +1, -4 inches. At least 90% of the total footage of each size and class of pipe, excluding special order lengths, shall be furnished in nominal length sections.

- C. Pipe Stiffness:
 - 1. The pipe stiffness for this project shall be as noted on the plans.
- D. End Squareness:
 - 1. Pipe ends shall be square to the pipe axis with a maximum tolerance of 1/8".

2.4 TESTING

- A. Pipes:
 - 1. Pipes shall be manufactured and tested in accordance with ASTM D3262.
- B. Joints:
 - 1. Coupling joints shall meet the requirements of ASTM D4161.
- C. Stiffness:
 - 1. Minimum pipe stiffness when tested in accordance with ASTM D2412 shall normally be 46 psi, except as noted on plans.

2.5 INSPECTION

- A. The Owner or other designated representative shall be entitled to inspect pipes or witness the pipe manufacturing.
- B. Manufacturer's Notification to Customer: Should the Owner request to see specific pipes during any phase of the manufacturing process, the manufacturer must provide the Owner with adequate advance notice of when and where the production of those pipes will take place.
- C. Manufacturer shall provide field representative at the project startup and assistance throughout the project as required by the Contractor and the Owner.

2.6 PACKAGING, HANDLING, SHIPPING

- A. Packaging, handling, and shipping shall be done in accordance with the manufacturer's instructions.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Burial:
 - 1. The bedding and burial of pipe fittings shall be in accordance with the project plans and specifications and the manufacturer's requirements.
- B. Pipe Handling:
 - 1. Use textile slings, other suitable materials or forklift. Use of chains or cables is not recommended.
- C. Jointing:
 - 1. Clean ends of pipe and coupling components.
 - 2. Apply joint lubricant to pipe ends and elastomeric seals of coupling. Use only lubricants approved by the pipe manufacturer.
 - 3. Use suitable equipment and end protection to push or pull the pipes together.
 - 4. Join pipes in straight alignment then deflect to required angle not to exceed the deflection permitted by the manufacturer.

3.2 PRESSURE, LEAKAGE AND DEFLECTION TESTS

- A. General: Subject pipe to deflection test and one of the two following in-place tests:
 - 1. Infiltration/Exfiltration
 - 2. Joint Air Test
- B. Exfiltration Test:
 - 1. Before backfilling around pipe, plug end of both extremities of pipe section subjected to test.
 - a. Fill piping with water to minimum head of 5 FT above the highest point in the section, and let water stand until pipe has reached its maximum absorption and until trapped air has opportunity to escape.
 - 1) Allow 4 HRS.
 - b. After pipe has achieved maximum absorption, refill piping with water to the minimum head level.
 - c. After 15-minute intervals, record the difference in elevation of water surface and convert to gallons.
 - d. Achieve maximum exfiltration less than 25 GAL per inch of diameter per mile of pipe per 24 HRS.
- C. Infiltration Test:
 - 1. Perform and observe following testing criteria and procedures for non-pressure service or gravity drainage piping for compliance to infiltration allowances.
 - a. Ensure infiltration is less than 25 GAL per inch diameter per mile per 24 HRS.
- D. Joint Air Test:
 - 1. Perform joint air test on each joint laid.
 - 2. Conduct tests as follows:
 - a. The equipment used for joint testing shall be the type manufactured by Lanas, Cherny, or approved equal.
 - b. Each joint shall be tested successfully.
 - c. Joint tester shall be set over joint to be tested so that the two inflation tubes straddle the joint.
 - d. Inflate inflation tubes to 25 psig to seal off joint to be tested.
 - e. Apply air pressure into void between inflation tubes until pressure reaches 4 psig.
 - f. After pressure has stabilized, bleed air pressure back to 3.5 psig.
 - g. Record time required for pressure to drop from 3.5 psig to 2.5 psig.
 - 1) A minimum of five readings will be required for each test.
 - h. If the time in seconds for the air pressure to decrease from 3.5 psig to 2.5 psig is greater than 10 seconds, the joint shall be presumed to be free from defect.
 - 1) When the time is less than 10 seconds pipe breakage, joint leakage or leaking tester seals are indicated and an inspection must be made to determine the cause.
 - 2) The Contractor shall effect such repairs as may be required to accomplish a successful air joint test.
 - i. Joint shall be air tested.
 - 1) Air testing shall be performed as pipe installation progresses.
 - 2) At no time shall pipe installation exceed 500 FT from the latest joint tested.

- j. After a manhole to manhole reach has been installed and backfilled the joint testing procedure will be used on every joint or as directed by the Engineer.
 - k. If any joint fails the initial joint test, the joint shall be removed and reinstalled until the joint test is successful.
 - 1) If the joint fails the second test following backfilling, the joint shall be repaired as described in subparagraph below.
 - l. No visible leaks shall be allowed after installation of the pipe and testing.
 - 1) All visible leaks shall be repaired using an approved non shrink grout in areas with no groundwater and pressure injected expansive sealant when the groundwater table will be above the pipe after installation.
3. Deflection:
- a. Maximum allowable deflection within the first 24 hours after all back filling and removal of dewatering system. 3 of the manufacturer's inside initial diameter.
 - b. Max insure allowable deflection 30 days after all backfilling and removal of dewatering system is 4% of the manufacturers inside diameter.
 - c. See plans for deflection charts
 - d. The deflection test may be completed upon the completion of backfilling operations. Due to the nature of this project the City's standard requirement for 30 day waiting period will be waived for this project.

END OF SECTION

Special Provision For Consideration of Proposals (A+B Method)

Consideration of Proposals (A+B Method)

The General Conditions of the City of Sioux Falls Section 3.1 are hereby supplemented as follows:

A. General

The process for bidding on this Project will take into account not only the Contract amount bid for construction items, but also the bidder's proposed number of calendar days, as set forth in I-D(b) of these Special Provisions to complete the work required for finishing all of the work and opening the roadway to seven (7) lanes of traffic. This shall include all phases required to open seven lanes of traffic on the bridge, barrier, sanitary sewer, storm sewer, paving, signing, lighting, striping, turf establishment/erosion control and final surfaces as approved by the Engineer, and all other work required for the safe movement of seven (7) lanes of traffic.

The Contractor will be allowed an additional fourteen (14) Calendar days for ancillary work that will not impact traffic by requiring a temporary lane closure. Also ancillary work will not impact any business (i.e. parking lot work that affects parking or internal traffic flow).

B. Definition of Terms

For this Project the following definitions apply:

- (1) Calendar Day – A day shown on the calendar, beginning and ending at midnight. Every day, including Saturdays, Sunday, and Holidays are considered calendar days.
- (2) Working Day – A day that the Contractor has identified as a regularly scheduled work day.
- (3) Contract Amount – The summation of the products of the quantities shown in the bid schedule multiplied by the unit bid prices (excluding item Special (Contract Time)).
- (4) Disincentive – Monies subtracted from the contractor for completing the project later than the time stated by the Contractor. The Disincentive \$10,000.00.
- (5) Liquidated Damages – the cost to the City of the administration of the contract, including engineering, inspection, and supervision.
- (6) Completion of Work – When all work required to safely open the roadway to seven (7) lanes of traffic is completed as set forth in I.A.

C. Preparation of Proposal

The bidder shall establish the number of Calendar Days to be used for the Completion of Work as defined in Section S-1.2 (Definition of Terms).

The total number of Calendar Days established by the bidder shall be less than or equal to **160 Calendar Days**. Bids showing the Completion of Work specified in Section III in excess of **160 Calendar Days** will be considered non-responsive and will be rejected. Any decision by a bidder to bid less than 160 Calendar Days is entirely at the bidder's own risk; the City does not warrant that the Completion of Work can be completed in less than 160 Calendar Days.

The bidder shall enter the number of Calendar Days bid as Item Special (Contract Time) on the Bid Proposal, in the # of Days column.

D. Consideration of Bids

Each bid submitted shall consist of two parts:

- (1) The Contract Amount of construction pay items (not including Bid Item Special (Contract Time)).

- (2) Bid Item Special (Contract Time): Total number of Calendar Days proposed by the bidder for the Completion of Work specified in Section III.

The successful bid will then be determined by the City as the lowest combination of (a) and (b) according to the following formula:

$$(a) + ((b) \times (\text{Disincentive})) = \text{bid amount for award consideration.}$$

Where Disincentive = \$10,000

The preceding formula will be used to determine the successful bidder and will not be used to determine the Contract award amount nor final payment to the Contractor when the Project is completed. Only the Contract Amount will be used to determine the final payment to the Contractor, except as may be adjusted under the conditions of the Contract.

E. Disincentive

Failure to complete the work within the established number of Calendar Days stated by the Contractor will be subject to monetary deductions as shown in **Section III (Failure to Complete the work on Time)** of these Special Provisions.

F. Incentive

In the event that the Completion of Work as defined in III of this special provision is completed in advance of established number of Calendar Days stated by the Contractor in item Special (Contract Time), payment otherwise due in the Contract will be adjusted with an incentive as shown in **Section II (Determination of Contract Time)** of these Special Provisions.

Determination and Extension of Contract Time

- A. All work required for the Completion of Work as defined in Section I (Consideration of Proposals (A+B Method)) under this contract, shall be completed within the time frame specified by the Contractor as set forth in Section I (CONSIDERATION OF PROPOSALS (A+B METHOD)) of these Special Provisions.

(1) In the event that the Completion of Work is completed in advance of this time frame, payment otherwise due in the Contract will be adjusted with an incentive payment of **\$250,000 (Two-Hundred Fifty Thousand Dollars)** lump sum payment plus **\$10,000 (Ten-Thousand Dollars)** for each Calendar Day that the Completion of Work specified in I.A is completed prior to the specified time frame. The total incentive amount shall not exceed **\$500,000 (Five Hundred Thousand Dollars)**. Payment of the incentive will be made on the first partial estimate voucher processed after the Completion of Work has concluded.

Failure to Complete the Work on Time

- A. **The City will deduct from any monies due or coming due to the Contractor a disincentive in an amount equal to \$10,000 for each Calendar Day that the work specified in Section II (DETERMINATION AND EXTENSION OF CONTRACT TIME) remains uncompleted after the expiration of the Calendar Days established by the Contractor.**
- B. Should the Contractor fail to complete the work within 160 calendar days or as allowed by increases in the contract or by formally approved extensions granted by the City, there shall be deducted from monies or amounts due or that may become due the Contractor, the sum set forth in the schedule in Section 8.7 of the SDDOT Standard Specifications for each and every calendar day, that the work shall remain uncompleted.

Adverse Weather Day

A. Definition: A day that:

- (1) Weather precludes five or more hours of work on the **Controlling Activity** (or activities) (Hours not allowed for work shall be during the contractor's regularly scheduled work hours;
- (2) The contractor has a workforce on the project attempting to work on the **Controlling Activity** (or activities); and
- (3) Would otherwise be a **Working Day**.

B. Adverse Weather Day

For whole or partial months within the contract time, the table "Adverse Weather Days Expected" shows the number of working days included in the anticipation of weather that will preclude work. On the Engineers Weekly reports, the Engineer will show for each month, and for the project to date, the number of actual adverse weather days determined by the Engineer and the amount by which this exceeds the number expected.

The Engineer may extend the calendar days if the actual number of adverse weather days exceeds the expected number and the Contractor has pursued the work diligently during the month.

The Engineer will not count or treat Sundays or Holidays as adverse weather days.

Month	Adverse Weather Days Expected Workdays Incorporated in Contract Time in Anticipation of Adverse Weather
January	23
February	21
March	12
April	4
May	5
June	6
July	5
August	4
September	4
October	3
November	11
December	22

Special Provision For Critical Path Method Scheduling

I. Definitions

- A. Activity: A fundamental unit of work in a Project Plan and CPM Schedule establishing the time, cost and resources required for performing or furnishing a part of the Work, or a requisite step. Each activity has defined geographical boundaries, time duration in days and a detailed estimate of cost required to construct the task. Each activity is assigned a unique description, activity number, activity codes and a dollar value.
- B. Adjusted Baseline Schedule: The adjusted baseline schedule shall be a copy of the approved baseline schedule, which incorporates all, approved change orders and approved logic changes.
- C. Baseline Schedule: The initial approved Schedule representing the Contractor's work plan on the first working day of the project. The Baseline schedule shall represent the Contractor's best judgment and intended plan for completion of the Work in compliance with specific dates listed in the Contract Documents. The Baseline schedule shall take into account all foreseeable activities to be accomplished by any separate contractors, interface dates with utility owners/railroads/municipalities/agencies, submittal review. The Baseline schedule shall anticipate all necessary labor equipment, materials and resources to accomplish activities within the duration set forth in the as-planned construction schedule.
- D. Contract Time: The Owner's specified time to complete the project. Contract Time will be designated in the contract documents as a specified completion date.
- E. Contract Schedule: The most current version of the Schedule that has been reviewed and approved by the Owner. The Contract schedule represents the most current approved adjusted baseline schedule and the most current approved working schedule. The working schedule shall be updated monthly. The updated working schedule shall be used for subsequent planning, scheduling and management. The updated working schedule shall include actual progress only. Approved logic changes and approved change orders incorporated into the adjusted baseline schedule shall be incorporated into the working schedule.
- F. Constraint: A scheduling restriction imposed on the start or finish of an activity.
- G. Cost Loading: The Contractor shall allocate the total contract sum and contract bid quantities throughout the Project activities scheduled for the project. The cost allocation shall accurately reflect the Contractor's cost for each Project activity, and shall not artificially inflate, imbalance, or front-load line items. The price of each Project activity shall be all-inclusive, and shall include all direct and indirect costs, overheads, risks, and profit. The sum of costs for all activities must equal the total contract sum as shown on the contract proposal form.
- H. CPM Schedule: Computerized cost and resource loaded schedule which accounts for the entire work and reflects work remaining and how completed work was performed as to sequencing and timing, in CPM format.
- I. CPM Network: The structure of the computerized schedule. The CPM network accounts for the entire work and defines the construction logic in terms of all of the activities with their logical dependencies.

- J. Critical Path: The longest continuous chain of activities for the project that has the least amount of total float of all chains. In general, a delay on the critical path will extend the scheduled completion date.
- K. Critical Path Method (CPM): A network-based planning technique using activity durations and the relationships between activities to mathematically calculate a schedule for the entire project. The mathematical calculation shall be performed utilizing retained logic.
- L. Data Date: The day after the date through which a schedule is current. Everything occurring earlier than the data date is "as-built" and everything on or after the data date is "planned".
- M. Float: The difference between the earliest and latest allowable start or finish times for an activity.
- N. Early Dates: The early start dates and early finish dates, i.e., the dates each Activity will start and finish if each is started at the earliest end of the range of dates that the CPM Schedule indicates the Activities can be performed.
- O. Excusable Delay: An unforeseeable delay, beyond the control of the Contractor, experienced due to no fault or negligence by the Contractor, its subcontractors or suppliers.
- P. Fragnet: A predefined or individual segment of a network, which represents a specific sequence of the Work.
- Q. Late Dates: The late start dates and the late finish dates; i.e., the dates each Activity will start and finish if each is started at the latest end of the range of dates that the CPM Schedule indicates the Activities can be performed and still achieve the milestones and Contract Time.
- R. Milestone: An event activity that has zero duration and is typically used to represent the beginning or end of a certain stage of the project.
- S. Near Critical Path: A chain of activities with total float exceeding that of the critical path but having no more than 10 days of total float.
- T. Predecessor Activity: An activity, which precedes another activity (to which it is logically tied) in the network.
- U. Prohibitions: The schedule shall not use any unspecified milestones, float suppression techniques, time or date constraints, or activity duration, logic tie and/or sequence that is deemed unreasonable by the City.
- V. Resource Loading: The allocation of direct and indirect labor in terms of person-hours, materials in terms of units identified within the schedule of quantities, and equipment in terms of each type necessary for the completion of an activity as scheduled.
- W. Successor Activity: An activity, which follows another activity (to which it is logically tied) in the network.
- X. Time Impact Analysis: A schedule and narrative report developed specifically to demonstrate what effect a proposed change or delay has on the current scheduled completion date.

- Y. Total Float: Number of working days by which a part of the Work in the Progress Schedule may be delayed from its Early Dates without necessarily extending the Contract Time.
- Z. Work Breakdown Structure: The Work Breakdown Structure (WBS) is a hierarchial arrangement of work activities necessary to complete a project.

II. Purpose

- A. Ensure adequate planning during the prosecution and progress of the work in accordance with the allotted Contract Time and any interim milestones.
- B. Assure coordination of the efforts of the Contractor, subcontractors, City crews, private utilities, and others involved in the project.
- C. Assist the Contractor and City in monitoring the progress of the work and evaluating proposed changes to the contract.
- D. Provide accurate and up to date schedule information to the public and affected property owners, residents, and businesses.

III. CPM Scheduling Requirements

- A. The contractor shall be responsible for scheduling the project and providing the Owner with a CPM Schedule and providing monthly schedule updates. Monthly schedule updates shall be included with the Contractors monthly pay requests. Failure to provide a CPM schedule for monthly updates will result in withholding of the monthly pay application by the Owner. No pay requests will be processed without an accepted Baseline Schedule and subsequent monthly updates.
- B. The Contractor shall deliver the following information to the Contract Administrator:
 - 1. Contractor shall prepare and maintain a Contract or Project Schedule for the project using the Critical Path method of scheduling.
 - 2. The Project Schedule is defined as the approved baseline schedule or the most recently approved monthly adjusted baseline schedule, as applicable. The Project Schedule shall be used by both the Contractor and Owner for planning and monitoring project progress.
 - 3. The Project Schedule shall divide the Project into activities with appropriate logic ties to show the Contractor's overall approach to the planning, scheduling, and execution of the project. Sufficient detail shall be provided to demonstrate a reasonable and workable plan to complete the project within the Contract Time.
 - 4. Contractor shall prepare a CPM with a sufficient number of activities to properly control and monitor the progress of the work. Include long lead fabrication and delivery activities. Estimate durations for all activities. Identify responsibility for each activity. At a minimum the following items shall be included in the schedule when applicable to the project:
 - a. Project Phase
 - b. Location Description (i.e., Westport Avenue to Bridge)
 - c. Station Range
 - d. Mobilization
 - e. Removals
 - f. Bridge Phase Construction
 - g. Retaining Walls
 - h. Water Main

- i. Sanitary Sewer
 - j. Storm Sewer
 - k. Drop Inlets
 - l. Junction Boxes
 - m. Unclassified Excavation
 - n. Linear Grading
 - o. Aggregate Base
 - p. Curb & Gutter
 - q. Paving
 - r. Sidewalk
 - s. Sod/Seed
5. All project float shall be considered a project resource available to either Owner or Contractor as needed to achieve the scheduled completion deadlines. Contractor shall not sequester shared float through such strategies as extending activity duration estimates to consume available float, using preferential logic, using extensive crew/resource sequencing, etc. Since float time within the Project Schedule is jointly owned, no time extensions will be granted nor delay, until a delay occurs which extends the work beyond each Milestone completion date on the critical path. Since float time within the Project Schedule is jointly owned, it is acknowledged that Owner-caused delays on the project may be offset by Owner-caused time savings (e.g. submittals returned in less time than allowed by the Contract, approval of substitution requests which result in a savings of time to Contractor, etc.). In such an event, Contractor shall not be entitled to receive a time extension or delay damages until all Owner-caused time savings are exceeded and the Contract completion date is also exceeded.
6. Should the Project Schedule indicate an early completion date, Owner will not be liable in any way for the Contractor's failure to complete the project prior to the Contract completion date. Any additional costs, including extended overhead incurred between Contractor's Project Scheduled completion date and the Contract completion date shall be the responsibility of Contractor.
7. Schedule review meetings between Contractor and Owner shall be held no less than bi-weekly.
8. All Project Schedule submissions shall be reviewed by Owner within Fifteen (5) working-days of receipt. Rejected Project Schedules will be revised and resubmitted by Contractor within five (5) working-days of receipt of Project Schedule rejection notice. Re-submittals and Owner reviews of re-submittals shall occur at five (5) working-day intervals until such time that the Project Schedule is accepted by Owner.
9. Owner's review and acceptance of Contractor's Project Schedule is for conformance to the requirements of the Contract Documents only. Owner's review and acceptance of Contractor's Project Schedule does not relieve Contractor of any of its responsibility whatsoever for the accuracy or feasibility of the Project Schedule, or of Contractor's ability to meet interim milestone dates and the Contract completion date, nor does such review and acceptance expressly or impliedly warrant, acknowledge, or admit the reasonableness of the logic, durations, and cost loading of Contractor's Project Schedule.
10. Owner's review and/or acceptance of any of Contractor's Project Schedules do not constitute an adjustment of the Contract Times (or Milestones). The Contract Time (or Milestones) may only be changed by a Written Amendment, Change Order or a Work Change Directive following issued by the Owner.

IV. Schedule Reporting Requirements

- A. All submittals shall include the following:

1. A CPM time scaled logic network, computer generated using Primavera Project Planner software or SureTrak. The Project Schedule shall be submitted both on 11x17 inch paper and CD (electronically).
 2. Notation on each activity line shall include activity descriptions, total float, and durations as a minimum.
 3. All construction activities and procurement shall be indicated in a time-scaled format, and a calendar shall be shown on all sheets along the entire sheet length. Each activity shall be plotted so the beginning and completion dates of said activity can be determined graphically by comparison with the calendar scale. A legend shall be included clearly distinguishing between critical and non-critical path activities and progress to date.
 4. A logical succession of Work from start to finish.
 5. Footer information containing, at a minimum, the following:
 - a. Project Name (**41st Street Bridge Reconstruction**)
 - b. Project Name and Associated Contract Numbers (Bid Request No., CIP No., SRF No.)
 - c. Contractor name
 - d. Type of Tabulation (Baseline or Monthly Update)
 - e. Project Duration
 - f. Project Scheduled Completion Date
 - g. Contract Completion Date
 6. All activities on a project calendar (5, 6, or 7 days/week) with Owner holidays shown as non-work days. All project duration shall be shown in whole working days, with no duration exceeding fifteen (15) days.
 7. Cost and resource loaded activities amounting to the total amount of the contract.
 8. Factory-default settings, within the software, for all cost-related options.
 9. Clear, descriptive, unique activity descriptions
 10. All Project float
 11. One NTP start milestone and one project complete finish milestone.
- B. The following items shall be disallowed or excluded from all schedule submissions
1. Negative logs
 2. Start-to-Finish (SF) relationships
 3. Constraints, including float constraints, with the exception of a "Start no Earlier" constraint on the NTP start milestone and a "Finish no Later" constraint on the project completion milestone.
 4. More than one activity with no predecessor
 5. More than one activity with no successor
 6. More than one critical path
 7. Cost loaded hammers
 8. Logic loops
 9. Imposed finish dates
 10. The use of calendar days to logically begin or complete any project activity, unless specifically required by the Scope of Work or the Contract.

V. Baseline Schedule

- A. A baseline CPM Project Schedule shall be submitted within fifteen (15) calendar days after execution of the contract. In addition to the requirements of Section I, the baseline Project Schedule submission shall include the following:
1. Data date equal to project start equal to Notice to Proceed (NTP)
 2. No negative float
 3. Only zero (0) percent complete shown for all activities

4. No more than 30% of activities with less than 10 days of float.
5. Basis of Project Schedule narrative describing the logic and reasoning of the Project Schedule.

VI. Schedule Updates

- A. The contractor is responsible for updating
- B. Updates shall be submitted monthly each month following submission of the baseline Project Schedule. In addition to the requirements of Section I, Project Schedule updates shall include the following:
 1. Update work commencement dates and estimated completion dates for each subcontractor that will perform work on the project
 2. Actual start (AS) and actual finish (AF) dates.
 3. Activity progress (percent complete)
 4. Adjustments to contract price and time, as authorized by Owner issued Change Orders.
 5. A narrative including the following:
 6. A summary of progress for the month
 7. Description of any current and anticipated delaying factors
 8. Explanation for failure to commence any activity that should have started but did not.
 9. Explanation of logic changes
 10. Explanation of changes to duration in excess of 10% of baseline durations.
 11. Areas of possible concern with regard to completing the project on time.
 12. The following items are disallowed and shall be excluded from schedule update submissions, unless specifically authorized by Owner in writing.
 13. Changes to Original Duration
 14. Changes to activity descriptions of Ids
 15. Deletion of activities
 16. Changes to cost loading

VII. Schedule Revisions

- A. Owner may direct and, if so directed, Contractor shall propose revisions to the Project Schedule upon occurrence of any of the following instances:
 1. The actual physical progress of the Work falls more than five percent (5%) behind the accepted Project Schedule, as demonstrated by comparison to the last accepted monthly Project Schedule update or Baseline Schedule.
 2. Owner considers milestone or completion date to be in jeopardy because of “Activities behind Project Schedule”. “Activities behind Project Schedule” are all activities that have not or cannot be started or completed by the dates shown in the Project Schedule, regardless of the existence of positive float on the activity.
 3. A Change Order has been issued that changes, adds, or deletes Project Scheduled Activities or affects the time for completion of Project Scheduled activities.
- B. When instances requiring revision to the Project Schedule occur, Contractor shall submit the proposed revised Project Schedule within (5) working-days after receiving direction from Owner to provide such Project Schedule. If owner accepts the proposed revised Project Schedule, it shall replace and supersede all previous Project Schedules and substitute for the next monthly Project Schedule update submission that would otherwise be required.

VIII. Coordination

- A.

The Contractor shall coordinate

with the City’s Consultant Contract Administrator during the initial planning and monthly updates to the project schedule, and provide schedule information in hard copy and electronic

format as necessary to administrate the contract and inform the public of the progress of the project.

- B. The Consultant Administrator
will assist and aid the Contractor in setting up the schedule, establishing the schedule format, detail, and Work Breakdown Structure as needed. The Contractor is and shall remain solely responsible for the planning and execution of work in order to meet the project milestones, interim completion dates, and stipulated contract time.

Direct questions pertaining to this special provision to:

Steve Hoff
HDR Engineering
6300 So. Old Village Place #100
Sioux Falls, SD 57108
Phone: 605-977-7740

END OF SECTION

**Special Provision
For Bridge Deck Finishing and Curing**

I. Description

This work consists of the finishing and curing bridge deck concrete in accordance with Section 460 and the following.

II. Materials

Materials shall be in accordance with Section 460.2, except as modified below:

Curing Materials shall conform to Section 821, except that white non-woven polypropylene geotextile conforming to the following requirements may be used in lieu of burlap.

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

III. Construction Requirements

- A. Concrete Placement:** Concrete placed in bridge decks shall be placed in accordance with Section 460 except as modified by these provisions.

In order to achieve the best possible ambient conditions for placing concrete in the bridge deck, the bridge deck concrete shall be placed during the coolest nighttime hours when the ambient daytime temperature is forecasted to exceed 80 degrees Fahrenheit. The Contractor shall provide sufficient lighting to assure that the work area is adequately lighted for construction and inspection as approved by the Engineer. Adequate lighting shall also be provided in an area approved by the Engineer for the purpose of materials testing.

- B. Bridge Deck and Approach Slab Finish:** The concrete bridge deck surface shall be finished in accordance with Section 460.3.M.4 except as modified by the following:

As soon as the bridge deck has been struck off and finished by the finish machine, it shall be given a transverse drag finish in accordance with Section 460.3.M.4. The drag shall consist of burlap, astro turf, or approved material attached to the carriage of the finish machine.

The finish machine shall be operated such that hand finish work behind the finish machine is kept to a minimum. Hand finish work of the concrete behind the finish machine will be allowed as necessary to assure that the top surface of the concrete is adequately finished and to assure a smooth ride, provided that the hand finishing is kept to a minimum such that there are no delays to tining and curing. Any transverse drag surface texture that is removed by hand finishing shall be replaced by broom finishing prior to tining. Tining of the concrete surface shall be in accordance with Section 460.3.M.4.c and shall be performed immediately after concrete finishing is completed.

Immediately after concrete finishing, a fog shall be applied to the exposed concrete surfaces until such time that wet burlap is in place in such a way as to prevent drying of the concrete surface. Maintain the fogging to produce a “gloss to semi-gloss water sheen” on the concrete surface until the wet burlap is applied. The bridge deck surfaces shall **NOT** be treated with curing compound.

Fogging equipment shall be capable of applying a fine fog mist in sufficient quantity to curb the effects of rapid evaporation of mixing water from the concrete resulting from wind, high temperature, or low humidity, or a combination of these factors. The fogging equipment shall be capable of being turned off and on as necessary, or as directed by the Engineer.

Only equipment capable of producing a fog or mist shall be used. Moisture from the fog applicators under pressure shall not be applied directly upon the concrete and cannot accumulate on the surface in a quantity to cause a flow or wash the surface.

Fog misting shall not be used to apply water to the surface of the concrete to facilitate lubrication for finishing purposes. Water on top of the fogged concrete surface shall not be worked into the surface of the concrete.

Fogging equipment shall be such that the fog spray is produced from nozzles that atomize the droplets and are capable of keeping a large area damp without depositing excess water. Use high pressure equipment that generates at least 1200 psi at 2.2 gpm (8.3 Mpa at 8.3 L/min) or low pressure equipment having nozzles capable of supplying a maximum flow rate of 1.6 gpm (6.1 L/min). Handheld weed sprayers are not allowed. Water shall not be allowed to drip, flow, or puddle on the concrete surface during fog misting.

The Contractor shall demonstrate the fog mist system at the bridge deck prepour inspection to verify that sufficient volume and coverage will be attained. A fogging system shall not be used until approved by the Engineer.

Apply fog spray upwind of the concrete placement during finishing, texturing and until the concrete is covered by wet burlap.

A single layer of wet burlap shall be placed as soon as possible, but in no case shall the wet burlap placement exceed a distance of 25 feet behind the finish machine. In the event of a delay in concrete placement or finishing, the wet burlap shall be placed on as much of the exposed concrete behind the finish machine as is practical. The burlap shall be pre-wetted by soaking in water for a minimum of 4 hours and then draining the soaked burlap such that the free water is removed prior to placement. If non-woven polypropylene geotextile is used in lieu of burlap, pre-wetting may be done immediately prior to placement. Caution shall be used when placing wet burlap so that no damage occurs to the surface. Placement of dry burlap and then wetting the burlap once it is in place is not allowed.

The burlap shall be kept continuously wet by misting with water until such time that the concrete can support soaker hoses without causing deformation to the concrete. At that time, soaker hoses shall be placed on top of the burlap and the burlap and the soaker hoses covered with polyethylene sheeting.

In lieu of the above, the Contractor may immediately cover the wet burlap with polyethylene sheeting. Once the concrete can be walked on without damaging it, the Contractor shall then pull back the polyethylene sheeting and place the soaker hoses between the burlap and polyethylene sheeting. The burlap shall not be exposed for such duration that it dries prior to being recovered with the polyethylene sheeting. The soaker hoses must be placed and recovered within 24 hours of completion of the deck pour.

Water shall be run through the soaker hoses periodically as required to keep the burlap continuously wet, but at a minimum of once per day. These wet cure procedures shall be continued for a period of 7 days after completion of the deck pour.

IV. Method of Measurement

- A. Bridge Deck Curing & Finishing:** Measurement for Bridge Deck Curing & Finishing will not be made.

V. Basis of Payment

- A. Bridge Deck Curing & Finishing:** Bridge Deck Curing & Finishing will be paid for in accordance with Section 460.5.

END OF SECTION

**Special Provision
For
Concrete Penetrating Sealer**

IX. Description

This work consists of furnishing and plying a concrete penetrating sealer to a properly prepared bridge deck surface in compliance with these specifications and the manufacturer's recommendations.

X. Materials

The acceptable sealers are listed on the approved products list for Bridge Deck Sealants on the SDDOT Website.

The Contractor shall furnish the Engineer the manufacturer's technical data sheets, MSDS, and sufficient evidence that the material to be used has not exceeded the manufacturer's specified shelf life. This documentation shall be furnished to the Engineer a minimum of 5 days prior to application of the sealer.

XI. Construction Requirements

C. Surface Protection and Preparation: The concrete deck surface shall be protected from contamination from dirt and debris by covering the deck with a material approved by the Engineer until such time that the surface preparation for the penetrating sealer is begun. Any materials or equipment placed on the deck during this protection period shall be placed such that there is no danger of spillage, leakage, or other contamination to the concrete surface.

Concrete surfaces shall be cleaned by power-washing such that all traces of laitance, dirt, dust, salt, oil, asphalt, paint, and other foreign materials and deleterious substances are removed prior to application of the penetrating sealer. In the event that oil, grease, or other contaminants are inadvertently spilled on the concrete surface, detergent cleaning along with an abrasive blast cleaning will be required on the affected areas.

Other methods and equipment for surface preparation may be used if prior approval is obtained from the Engineer.

If necessary, solvents and hand tools shall be used in conjunction with the blasting media to remove bonded materials detrimental to the treatment of the concrete surface.

The cleaning process shall not cause undue damage to the concrete surface, remove or substantially alter the existing surface finish, or exposed the coarse aggregate of the concrete. The method of cleaning shall be performed in such a manner as to provide a reasonably uniform appearing surface color and texture.

The sealer may be harmful to materials such as rubber, asphalt, and joint compounds; therefore, the Contractor shall be required to mask off all joints, strip seals, etc. prior to applying the sealer.

The Engineer shall approve the prepared surface prior to application of the penetrating sealer.

D. Sealer Application: The Contractor shall have a sufficient quantity of sealer on the project prior to the start of application such that the manufacturer's maximum rate of coverage (minimum ft²/gal) can be attained. Sealer application shall conform to the manufacturer's recommendations and the following:

- 1. Weather Limitations:** The penetrating sealer shall only be applied when the ambient air and concrete surface temperatures are between 40° F and 100° F unless otherwise recommended by the manufacturer. The treatment solution shall not be sprayed when blowing winds or other conditions prevent proper application.

The sealer shall not be applied during inclement weather or rain, or if inclement weather or rain is anticipated within 24 hours.

- 2. Application Equipment:** Spray equipment for the application of the treatment solution shall be a low-pressure airless type sprayer with a maximum application pressure of 15 psi.
- 3. Application:** Concrete shall be cured for 14 days prior to the application of the sealer. The sealer may be applied prior to the 14 day cure period, provided that there is no evidence of moisture in the concrete when tested in accordance with ASTM D4263 and the concrete has attained 80% of the specified strength.

All surfaces shall be substantially dry prior to application of the sealer. The concrete surfaces shall be allowed to dry a minimum of 3 days after powerwashing or precipitation. The Engineer will determine when the surface is sufficiently dry.

All loose dust and debris shall be blown off of the concrete surface with compressed air immediately prior to application of the sealer.

The sealer shall be used as supplied by the manufacturer and shall not be diluted or altered in any way.

The solution shall be sprayed on to the concrete surfaces at the manufacturer's recommended maximum rate of coverage (minimum ft²/gal) or to refusal, whichever is achieved first. Refusal is defined such that additional spray applications remain on the concrete surface and do not soak in, as determined by the Engineer.

If the plans specify a grooved bridge deck surface, the grooving shall be accomplished prior to the application of the sealer.

- 4. Traffic Limitations:** Traffic will not be permitted on treated surfaces nor shall pavement markings be applied until the solution has completely penetrated and the treated surface is dry. The Engineer will determine when the surface is sufficiently dry.

XII. Method of Measurement

- A. **Concrete Penetrating Sealer:** Concrete Penetrating sealer will be measured to the nearest 0.1 square yard.

XIII. Basis of Payment

- A. **Concrete Penetrating Sealer:** Concrete Penetrating sealer will be paid for at the contract unit price per square yard. Payment will be full compensation for equipment, labor, materials, and all other incidental items required to prepare the concrete surfaces, and to furnish and apply the penetrating concrete sealer.

END OF SECTION

ATTACHMENT A

GEOTECHNICAL EXPLORATION
PROPOSED 41ST STREET BRIDGE REPLACEMENT
SIOUX FALLS, SOUTH DAKOTA

GEOTEK #04-530



July 15, 2004

Office of City Engineer
224 W. 9th Street
Sioux Falls, SD 57104

Attn: Patrick Schwebach

Gentlemen:

Subj: Geotechnical Exploration
Proposed 41st Street Bridge Replacement
Sioux Falls, South Dakota
GeoTek #04-530

This correspondence presents our reporting of the geotechnical exploration for the referenced project. We are transmitting one copy of our report. Additional copies are being sent as noted below. This work was done in accordance with your request on June 10, 2004.

We thank you for the opportunity of providing our services on this project, and look forward to working with you in the future. Should you have any questions regarding the project or the report, please feel free to contact our office.

Respectfully submitted,

Ralph E. Lindner, PE
Project Engineer

cc: HDR

**GEOTECHNICAL EXPLORATION
PROPOSED 41ST STREET BRIDGE REPLACEMENT
SIOUX FALLS, SOUTH DAKOTA**

GEOTEK #04-530

INTRODUCTION

This report presents the results of the recent subsurface exploration program for the proposed 41st Street Bridge replacement in Sioux Falls, South Dakota.

The scope of work as presented in this report is limited to the following:

1. To put down two test borings to gather data on the subsurface conditions for the proposed site.
2. To conduct field and laboratory tests to determine the engineering properties of the foundation soils.
3. To provide a written report for foundation recommendations for design and construction.



FIELD DATA

Site Conditions

The site is located on 41st Street over the Big Sioux River. Both test borings were drilled on the north side of the existing structure in grass covered areas that sloped down to the river.

A site sketch is attached near the conclusion of the report showing the relative locations of the soil borings. Surface elevations at the boring locations were referenced to "#5 rebar" provided by HDR with an elevation of 1421.83'.

Subsurface Conditions

Two test borings were put down to gather data on the subsurface conditions for the planned construction. The attached boring logs illustrate the soil conditions encountered at the test locations.

A review of the boring logs indicates a soil profile which consists of a varying thickness of fill from 2' to 14' underlain by sand and lean clay (glacial till). The lean clay soils extended to a depth of 39' where a dark gray shale and a dense silty sand (siltstone/sandstone) was found. These materials likely originate from the Split Rock Formation. At about 75' a quartzite sand was encountered with borings being



obstructed between 76' and 78'. The obstruction may be the Sioux Quartzite Bedrock.

The consistency of the clay soils varied from rather stiff to very stiff. The density of the granular material was medium dense to very dense. The consistency and density of the soils are indicated by the N value (penetration resistance) as shown on the boring logs.

Groundwater

Drilling fluids were used to advance the bore holes and thusly no accurate groundwater measurements were obtainable.

ENGINEERING REVIEW

Project Information

The bridge replacement will use a deep foundation system for support. The deep foundation will consist of a series of driven steel piles. HP 12 x 53 piles will be used with a working capacity of 70 tons per pile.

The above information and/or assumptions are important factors in our review and recommendations. If there are any additions or corrections to the above mentioned



data, it is necessary that you contact us so that we may review our recommendations with regards to the revised plans.

Analysis

In our opinion, the bridge construction can be supported by the planned driven steel piling. The 70-ton working capacity would be reached at a depth of 70' to 77' below grade.

The piles should be driven with a properly sized hammer. The rate energy for the pile hammer should be in the range of 28,0000 to 40,000 Ft-lb.

Pile capacity should be verified at the time of driving. Capacity can be determined with the Pile Driving Analyzer (PDA). Alternating, calculation can be made using the Engineering News Letter formula (ENR).



STANDARD OF CARE

The recommendations and opinions presented in this report are in accordance with current engineering practices for this time and area. Other than this, no express or implied warranty is intended.

Because the area of the borings is small in relation to the entire site, and for other reasons, GeoTek does not guarantee continuity or warrant conditions between the soil borings.

REMARKS

The collected soil samples will be retained in our office for a period of thirty days after the date of this report and will then be discarded unless we are notified otherwise.

We trust that this report provides you with the necessary information for the project.

Should you have any comments or questions, please feel free to contact our office.

GeoTek Engineering & Testing Services, Inc.



Ralph E. Lindner, PE
Project Engineer





GEOTEK ENGINEERING
 & TESTING SERVICES, INC.
 909 EAST 50TH STREET NORTH
 SIOUX FALLS, SOUTH DAKOTA 57104
 605-335-5512 FAX 605-335-0773

GEOTECHNICAL TEST BORING LOG

JOB # 04-530 BORING # SB1
 PROJECT PROPOSED 41ST STREET BRIDGE REPLACEMENT, SIOUX FALLS, SD

DEPTH IN FEET	DESCRIPTION OF MATERIAL	GEOLOGIC ORIGIN	SAMPLE DATA				LABORATORY TESTS			
			WL	N	NO	TYPE	W	D	LL PL	QU
	SURFACE ELEVATION 1416.5' FILL, mostly clay, a little gravel, black & brown	FILL			1	AUGER				
					2	AUGER				
					3	AUGER				
					4	AUGER				
19	SAND, medium grained, a little gravel, brown, moist at about 20' then water-bearing, loose (SP)	COARSE ALLUVIUM		7	5	SB				
21	LEAN CLAY, a little gravel, brown, rather stiff to stiff (CL)	TILL								
				15	6	SB				
30	CONTINUED ON NEXT PAGE									



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GEOTECHNICAL TEST BORING LOG

JOB # 04-530 BORING # SB1 CONT
 PROJECT PROPOSED 41ST STREET BRIDGE REPLACEMENT, SIOUX FALLS, SD

DEPTH IN FEET	DESCRIPTION OF MATERIAL SURFACE ELEVATION _____	GEOLOGIC ORIGIN	SAMPLE DATA				LABORATORY TESTS			
			WL	N	NO	TYPE	W	D	LL PL	QU
				50.8	7	SB				
				23	8	SB				
39	FAT CLAY, dark gray, stiff (CH)	SPLIT ROCK FORMATION		17	9	SB				
				16	10	SB				
				21	11	SB				
				25	12	SB				
60	CONTINUED ON NEXT PAGE									



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GEOTECHNICAL TEST BORING LOG

JOB # 04-530 BORING # SB2
PROJECT PROPOSED 41ST STREET BRIDGE REPLACEMENT, SIOUX FALLS, SD

DEPTH IN FEET	DESCRIPTION OF MATERIAL SURFACE ELEVATION 1422.6'	GEOLOGIC ORIGIN	SAMPLE DATA				LABORATORY TESTS			
			WL	N	NO	TYPE	W	D	LL PL	QU
4	FILL, mostly clay, a little gravel, dark brown	FILL			1	AUGER				
	LEAN CLAY, a little gravel, brown (CL)	TILL			2	AUGER				
19	LEAN CLAY, a little gravel, dark brown, rather stiff (CL)			15	3	SB				
24	LEAN CLAY, a little gravel, dark gray, stiff, a few lenses of sand (CL)			18	4	SB				
30	CONTINUED ON NEXT PAGE									



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GEOTECHNICAL TEST BORING LOG

JOB # 04-530		BORING # SB2 CONT								
PROJECT PROPOSED 41ST STREET BRIDGE REPLACEMENT, SIOUX FALLS, SD										
DEPTH IN FEET	DESCRIPTION OF MATERIAL SURFACE ELEVATION _____	GEOLOGIC ORIGIN	SAMPLE DATA				LABORATORY TESTS			
			WL	N	NO	TYPE	W	D	LL PL	QU
				19	5	SB				
				17	6	SB				
39	FAT CLAY, grayish brown, rather stiff (CH)	SPLIT ROCK FORMATION		14	7	SB				
44	FAT CLAY, dark gray, rather stiff to stiff (CH)			12	8	SB				
				16	9	SB				
				25	10	SB				
60	CONTINUED ON NEXT PAGE									



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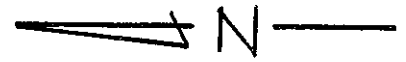
GEOTECHNICAL TEST BORING LOG

JOB # 04-530 BORING # SB2 CONT
 PROJECT PROPOSED 41ST STREET BRIDGE REPLACEMENT, SIOUX FALLS, SD

DEPTH IN FEET	DESCRIPTION OF MATERIAL SURFACE ELEVATION _____	GEOLOGIC ORIGIN	SAMPLE DATA				LABORATORY TESTS			
			WL	N	NO	TYPE	W	D	LL PL	QU
				16	11	SB				
64	SILTY SAND, fine grained, dark gray, very dense, a layer of coarse gravel or boulders at 65' to 66' (SM)			50/.3'	12	SB				
				50/.4'	13	SB				
74	SAND, fine grained, brown, very dense (SP)	QUARTZITE SAND		50/.2'	14	SB				
77.7	OBSTRUCTION AT 77.7'									

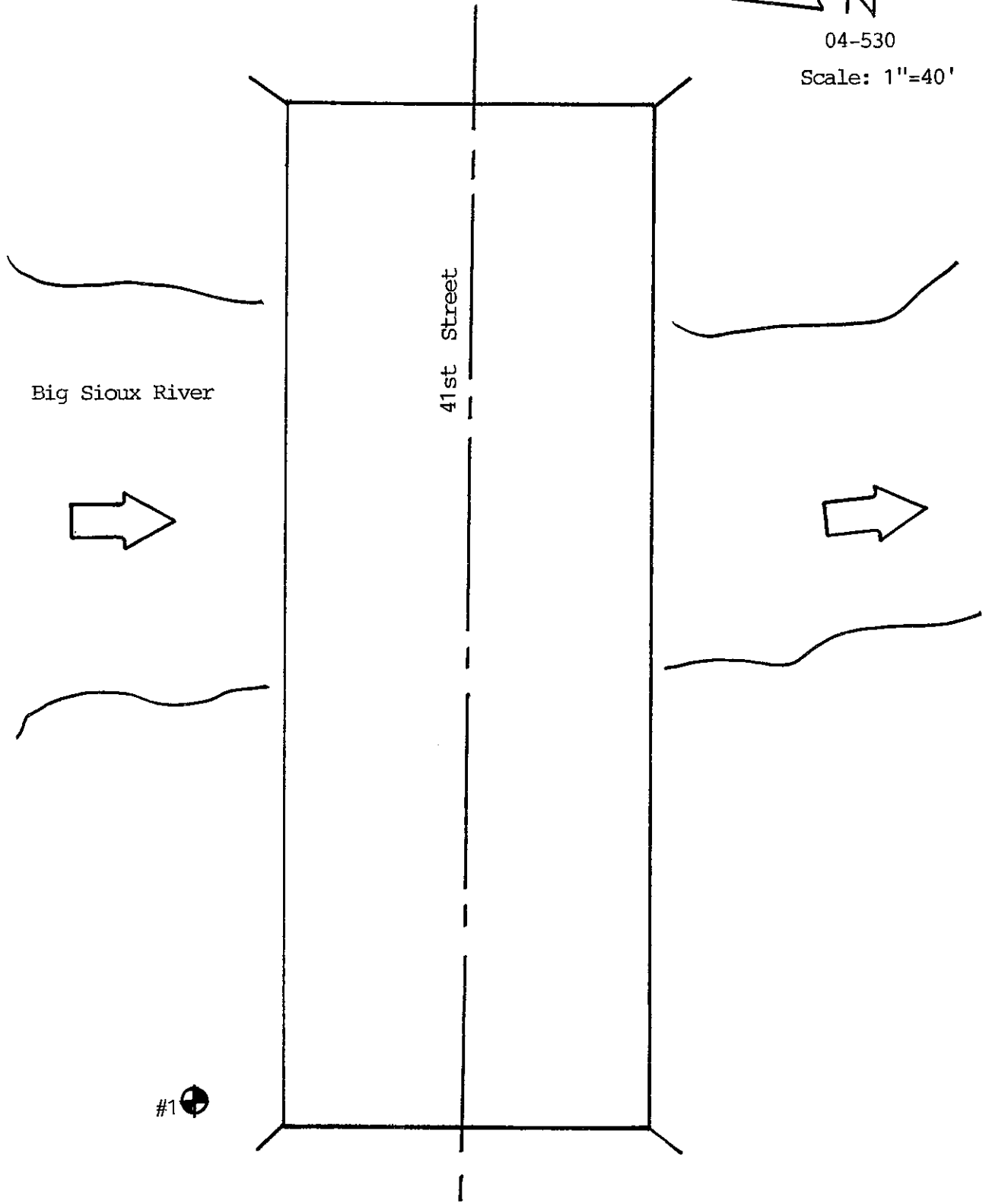
WATER LEVEL MEASUREMENT					DATE STARTED
DATE	TIME	WATER LEVEL	WATER ELEV.	CAVE-IN DEPTH	
6-22-04	1:00				6-22-04 @ 1:20
					METHOD OF DRILLING 3 1/4" HSA: 0'-49.5'DM: 49.5'-77.7'
					CREW CHIEF HANSON

#2



04-530

Scale: 1"=40'



GEOTEK ENGINEERING & TESTING SERVICES, INC.

GENERAL NOTES

DESCRIPTIVE TERMINOLOGY			RELATIVE PROPORTIONS AND SIZES	
DENSITY TERM	"N" VALUE	CONSISTENCY TERM		
Very Loose	0-4	Soft	Boulder	Over 12"
Loose	5-8	Medium	Cobble	3" - 12"
Medium Dense	9-15	Rather Stiff	Gravel	
Dense	16-30	Stiff	Coarse	¾" - 3"
Very Dense	Over 30	Very Stiff	Fine	# 4 - ¾"
			Sand	
			Coarse	#4 - #10
			Medium	#10 - #40
			Fine	#40 - #200
			Silt & Clay	-#200, Based on Plasticity
Lamination	Up to ½" thick stratum			
Layer	½" to 6" thick stratum			
Lens	½" to 6" discontinuous stratum, pocket			
Varved	Alternating lamination of clay, silt, and/or fine grained sand, or colors thereof			
Dry	Powdery, no noticeable water		Term	Range
Moist	Below saturation		Trace	0- 5%
Wet	Saturated, above liquid limit		A Little	5-15%
Waterbearing	Pervious soil below water		Some	15-30%
			With	30-50%

BORING AND SAMPLING SYMBOLS

SYMBOL	DEFINITION
___HSA	3¼" or 6¼" I.D. Hollow Stem Auger
___FA	4" or 6" Flight Auger
___HA	2", 4" or 6" Hand Auger
___DC	4" or 6" Drive Casing
PD	Pipe Drill or Clean Out Tube
CS	Continuous Split Barrel Sampling
DM	Drilling Mud
JW	Jetting Water
SB	2" O.D. Split Barrel Sample
TW	3" Thin Wall Tube Sample
LS	2½" O.D. SB Liner Sample
W	Wash Sample
B	Bag Sample
NSR	No Sample Retrieved, Classification based on action of drilling equipment and/or material noted in drilling fluid or on sampling bit.
NMR	No Water Level Measurement Recorded, Primarily due to presence of drilling or coring fluid.
WL	Water Level
N	Standard Penetration Value
▼	Water Level Symbol

Water level data is recorded at the bottom of the log sheet. Water levels are measured in the borings at the time and under the conditions indicated. Depending on soil types and length of time between measurements, the ground water measurement may or may not be a true indication of the ground water level for the time the boring was put down.

LABORATORY TEST SYMBOLS

SYMBOL	DEFINITION
W	Moisture Content-Percent of Dry Weight-ASTM: D2216
D	Dry Density-Pound Per Cubic Foot
LL	Liquid Limit and Plastic Limit—
PL	ASTM:D4318
QU	Unconfined Compressive Strength—Pounds Per Square Foot-ASTM: D2166

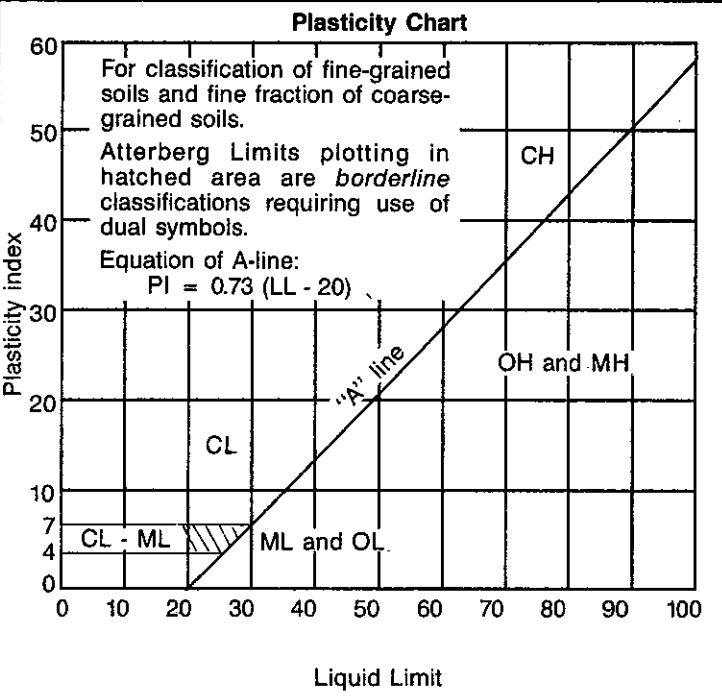


CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES

ASTM Designation: D 2487 — 69 AND D 2488 — 69

(Unified Soil Classification System)

Major divisions		Group symbols	Typical Names	Classification Criteria		
Coarse-grained soils More than 50% retained on No. 200 sieve*	Gravels 50% or more of coarse fraction retained on No. 4 sieve	Clean gravels	GW	Well-graded gravels and gravel-sand mixtures, little or no fines	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_z = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3	
		Gravels with fines	GP	Poorly graded gravels and gravel-sand mixtures, little or no fines		Not meeting both criteria for GW
		Sands More than 50% of coarse fraction passes No. 4 sieve	Clean sands	SW	Well-graded sands and gravelly sands, little or no fines	$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_z = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3
			Sands with fines	SP	Poorly graded sands and gravelly sands, little or no fines	
	Fine-grained soils 50% or more passes No. 200 sieve*	Silts and clays Liquid limit 50% or less	ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands	Classification on basis of percentage of fines Less than 5% pass No. 200 sieve GW, GP, SW, SP More than 12% pass No. 200 sieve GM, GC, SM, SC 5 to 12% pass No. 200 sieve <i>Borderline</i> classifications requiring use of dual symbols	Atterberg limits below "A" line or P.I. less than 4 Atterberg limits above "A" line with P.I. greater than 7 Atterberg limits plotting in hatched area are <i>borderline</i> classifications requiring use of dual symbols
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays		
			OL	Organic silts and organic silty clays of low plasticity		
		Silts and clays Liquid limit greater than 50%	MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts		
			CH	Inorganic clays of high plasticity, fat clays		
			OH	Organic clays of medium to high plasticity		
Highly organic soils	Pt	Peat, muck and other highly organic soils				



* Based on the material passing the 3 in. (76 mm) sieve.