

DEPARTMENT OF TRANSPORTATION

NOTICE TO CONTRACTORS,

PROPOSAL, SPECIAL PROVISIONS,

CONTRACT AND CONTRACT BOND

FOR

WATER AND SANITARY SEWER

CITY

PROJECT NO. <u>CIP 11100()</u> (PCN X06A)

CLIFF AVENUE

IN MINNEHAHA COUNTY

NOTICE TO ALL BIDDERS

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

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

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

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

* * * *

PLANS, PROPOSALS AND ADDENDA

AFTER AWARD OF CONTRACT, THE LOW BIDDER WILL RECEIVE TEN (10) COMPLIMENTARY SETS OF PLANS, PROPOSALS, PROJECT Q & A FORUM, AND ADDENDA FOR FIELD AND OFFICE USE. AN ELECTRONIC COPY WILL ALSO BE PROVIDED. ANY ADDITIONAL COPIES REQUIRED WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

NOTICE TO CONTRACTORS

Bid proposals for this project will be prepared, transmitted, and received electronically by the South Dakota Department of Transportation (SDDOT) via the South Dakota Electronic Bid System until <u>10</u> A.M. Central time, on <u>February 19, 2025</u>, at which time the SDDOT will open bids. All bids will be checked for qualifications with results posted on the SDDOT website. The South Dakota Transportation Commission will consider all bids at a scheduled Commission meeting.

The work for which proposals are hereby requested is to be completed within the following requirement(s):

FIELD WORK COMPLETION: JUNE 15, 2027

The DBE goal for this project is: NONE

Work Type for this project is: WORK TYPE 7

Bidding package for the work may be obtained at: http://apps.sd.gov/hc65bidletting/ebslettings1.aspx#no-back-button

An electronic version of the most recent version of the South Dakota Standard Specifications for Roads and Bridges may be obtained at <u>https://dot.sd.gov/doing-business/contractors/standard-specifications/2015-standard-specifications</u>

The electronic bid proposal must be submitted by a valid bidder as designated by their company's <u>http://apps.sd.gov/HC65C2C/EBS/BidAdminAuthorizationForm.pdf</u>. A bidding administrator will have privileges in the SDEBS to prepare bids, submit bids, and authorize additional company employees to prepare and submit bids. Additionally, a bidding administrator will be responsible for maintaining the list of authorized bidders for the company and will have the ability to add employees, remove employees, and set-up bidder identifications and passwords within the SDEBS. Bidding Administrator authorization will remain in full force and effect until written notice of termination of this authorization is sent by an Officer of the company and received by the Department.

A bidder identification and password, coupled with a company identification previously assigned by the Department, will serve as authentication that an individual is a valid bidder for the company.

Contact information to schedule a preconstruction meeting prior to commencing with the work on this project.

Harry Johnston 5316 W 60th St N Sioux Falls, SD 57107 Phone: 605/367-5680

PROPOSAL

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION, STATE OF SOUTH DAKOTA:

Ladies / Gentlemen:

The following proposal is made on behalf of the undersigned and no others. It is in all respects fair and is made without collusion on the part of any other person, firm or corporation not appearing in the signature to this proposal.

The undersigned certifies that she / he has carefully examined the plans listed herein, the Specifications hereinbefore referred to, the Special Provisions and the form of contract, both of which are attached hereto. The undersigned further certifies that she / he has personally inspected the actual location of the work, together with the local sources of supply and that she / he understands the conditions under which the work is to be performed, or, that if she / he has not so inspected the actual location of the work, that she / he waives all right to plea any misunderstanding regarding the location of the work or the conditions peculiar to the same.

On the basis of the plans, Specifications, Special Provisions and form of contract proposed for use, the undersigned proposes to furnish all necessary machinery, tools, apparatus and other means of construction, to do all the work and furnish all the materials in the manner specified, to finish the entire project <u>within the contract time specified</u> and to accept as full compensation therefore the amount of the summation of the products of the actual quantities, as finally determined, multiplied by the unit prices bid.

The undersigned understands that the quantities as shown in the Bid Schedule are subject to increase or decrease, and hereby proposes to perform all quantities of work, as increased or decreased, in accordance with the provisions of the specifications, and subject to any applicable special provisions, and at the unit prices bid.

The undersigned understands that the "Total or Gross Amount Bid" as immediately hereinbefore set forth is not the final amount which will be paid if this proposal is accepted and the work done, but that such amount is computed for the purpose of comparison of the bids submitted and the determination of the amount of the performance bond.

The undersigned further proposes to perform all extra work that may be required on the basis provided in the specifications, and to give such work personal attention in order to see that it is economically performed.

The undersigned further proposes to both execute the contract agreement and to furnish a satisfactory performance bond, in accordance with the terms of the specifications, within twenty (20) calendar days after the date of Notice of Award from the South Dakota Department of Transportation that this proposal has been accepted.

REV. 1/19/22

INDEX OF SPECIAL PROVISIONS

PROJECT NUMBER(S): CIP 11100()

PCN: X06A

TYPE OF WORK: WATER AND SANITARY SEWER

COUNTY: MINNEHAHA

The following clauses have been prepared subsequent to the Standard Specifications for Roads and Bridges and refer only to the above described improvement, for which the following Proposal is made. In case of any discrepancy or conflict between said specifications and these Special Provisions, the latter are to govern.

The Contractor's attention is directed to the need for securing from the Department of Environment & Natural Resources, Foss Building, Pierre, South Dakota, permission to remove water from public sources (lakes, rivers, streams, etc.). The Contractor should make his request as early as possible after receiving his contract, and insofar as possible at least 30 days prior to the date that the water is to be used.

Sara Garbe is the official in charge of the Sioux Falls Career Center for Minnehaha County.

THE FOLLOWING ITEMS ARE INCLUDED IN THIS PROPOSAL FORM:

Instructions for Bidders, dated 1/15/25.

Special Provision Regarding Combination Bids, dated 1/15/25.

Special Provision Regarding the City Portion for Subletting, dated 1/15/25.

Special Provision for Trenchless Construction, dated 11/15/18.

Standard Title VI Assurance, dated 3/1/16. Special Provision For Implementation of Clean Air Act & Federal Water Pollution Control Act, dated 9/1/97.

CIP 11100(), PCN X06A WATER AND SANITARY SEWER CLIFF AVENUE

INSTRUCTIONS FOR BIDDERS

January 15, 2025

- 1) This Water and Sanitary Sewer Project will be let and awarded by the South Dakota Department of Transportation.
- 2) South Dakota Department of Transportation Standard Specifications for Roads and Bridges Sections 2 and 3 regarding letting and awarding of contracts shall be followed.
- Bidders submitting a bid on this project shall also submit a bid for Project IM-B-CR 2292(101)3, PCN 05HN, Minnehaha County. Award of these projects will be to the same bidder based on the total of the two projects.
- 4) A prospective bidder must request any explanation regarding the meaning or interpretation of the bidding package in adequate time to allow a Department reply to reach all prospective bidders before submission of final bid proposals. The bidder will contact the Department by submitting a request for explanation to the project Q&A forum.
- 5) All bid bonds shall be made out to the Department of Transportation
- 6) The contract completion date for this project will be the same as specified of Project IM-B-CR 2292(101)3, PCN 05HN, Minnehaha County. Any delays in completing this contract will not be a basis for an extension of the contract completion time for PCN 05HN, Minnehaha County.
- 7) After award of contract, the Contractor shall furnish satisfactory proof of coverage of insurance. Copies of Certificates of Insurance shall be furnished to the Department of Transportation AND City of Sioux Falls. The Contractor will be required to provide a performance bond in a sum equal to the total amount of the contract, in a form acceptable to the City. The performance bond shall remain in effect for a period of one year after the City considers the contract to be completed and accepted.
- 8) The contractor is required to schedule and conduct a preconstruction meeting that shall be held jointly with the preconstruction meeting for the state contract. Additionally the contractor is responsible for contacting the city for a list of required submittals upon receiving Notice of Award of the contract.
- 9) Construction engineering for this contract will be performed by the City of Sioux Falls.
- 10) Payment for this Utilities project will be made to the Contractor by the City of Sioux Falls.

STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION REGARDING COMBINATION BIDS

CIP 11100(), PCN X06A WATER AND SANITARY SEWER MINNEHAHA COUNTY

JANUARY 15, 2025

Bidders submitting a bid on this project MUST ALSO submit a bid on project:

IM-B-CR 2292(101)3, PCN 05HN INTERSTATE HIGHWAY 229 GRADING, PCC SURFACING, STRUCTURES (10X4 RCBC EXTENSION, 163' TEMPORARY BRIDGE, (2) 400' STEEL GIRDER, (2) 12X8 CIP RCBC), RETAINING WALLS, CURB & GUTTER, STORM SEWER, SIGNALS, LIGHTING MINNEHAHA COUNTY

Award of both projects will be to the same bidder based on the total of the two projects.

Work on PCN (05HN) CANNOT be used to meet the DBE Goal established for this project.

After award, the contracts will be administered as entirely separate contracts.

STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION REGARDING THE CITY PORTION FOR SUBLETTING

CIP 11100(), PCN X06A MINNEHAHA COUNTY

JANUARY 15, 2025

This project is let in combination with State Project Number IM-B-CR 2292(101)3, PCN 05HN. The provisions of section 8.1 of the specifications requiring the Contractor to perform work amounting to not less than 30% of the total contract cost with the Contractor's own organization will not apply to the work on this contract.

City of Sioux Falls

Special Provisions

for

Trenchless Construction

City of Sioux Falls Public Works/Engineering City Center 231 North Dakota Avenue Sioux Falls, SD 57104

Adopted: July, 2015 Revised: November 15, 2018

1.0	GENERAL	1
1.1	SCOPE OF WORK	1
1.2	TERM OF WARRANTY	1
1.3	QUALITY CONTROL AND SUBMITTALS	1
1.4	EXISTING SITE CONDITIONS	2
1.5	PAYMENT	2
1.6	ACCEPTANCE	2
2.0	MATERIALS	3
2.1	CARRIER PIPE	
2.2	CASING PIPE	6
2.3	CASING END SEAL	7
2.4	CASING SPACERS	7
2.5	TRACER WIRE	8
2.6	CONTROLLED LOW STRENGTH MATERIAL	9
3.0	CONSTRUCTION REQUIREMENTS	10
3.0 3.1	CONSTRUCTION REQUIREMENTS	 10 10
3.0 3.1 3.2	CONSTRUCTION REQUIREMENTS ALIGNMENT AND GRADE EXCAVATION PITS	10 10 10
3.0 3.1 3.2 3.3	CONSTRUCTION REQUIREMENTS	10
3.0 3.1 3.2 3.3 3.4	CONSTRUCTION REQUIREMENTS	10
3.0 3.1 3.2 3.3 3.4 3.5	CONSTRUCTION REQUIREMENTS	10 10 10 10 10 10 10 10 10 10 10 10 10 10
3.0 3.1 3.2 3.3 3.4 3.5 3.6	CONSTRUCTION REQUIREMENTS	10 10 10 10 10 10 11 11 11
3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7	CONSTRUCTION REQUIREMENTS	10 10 10 10 10 11 11 11 14 15
3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 4.0	CONSTRUCTION REQUIREMENTS	10 10 10 10 10 10 11 11 11 14 15 16
3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 4.0 4.1	CONSTRUCTION REQUIREMENTS	10 10 10 10 10 10 11 11 11 14 15 16
3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 4.0 4.1 4.2	CONSTRUCTION REQUIREMENTS	10 10 10 10 10 10 11 11 11 11 14 15 16 16 16
3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 4.0 4.1 4.2 4.3	CONSTRUCTION REQUIREMENTS ALIGNMENT AND GRADE EXCAVATION PITS TRENCHLESS INSTALLATION. AUGER BORING (JACK AND BORE) DIRECTIONAL DRILLING. OPEN-ENDED PIPE RAMMING MICROTUNNELING METHOD OF MEASURMENT AND BASIS OF PAYMENT TRENCHLESS CONSTRUCTION CARRIER PIPE. CASING PIPE	10 10 10 10 10 10 11 11 11 11 14 15 16 16 16 16 16
3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 4.0 4.1 4.2 4.3 4.3 4.4	CONSTRUCTION REQUIREMENTS	10 10 10 10 10 10 11 11 11 11 14 15 16 16 16 16 16 16

City of Sioux Falls Special Provisions for Trenchless Construction

1.0 GENERAL

1.1 SCOPE OF WORK

The Contractor shall furnish all the necessary labor, materials, equipment, tools, and supplies that are necessary to complete the trenchless construction, as shown on the plans and/or called for in these specifications or its addenda. It is the intent of these specifications to install a complete system or job.

1.2 TERM OF WARRANTY

Reference Section 500—Warranty for Construction Activity.

1.3 QUALITY CONTROL AND SUBMITTALS

The Contractor or Supplier shall submit appropriate documentation for products and construction methods not listed in these specifications to the Engineer for approval. This documentation must be provided no later than seven days prior to bid opening. No consideration will be made by the Engineer or City for documentation submitted after this date.

Shop drawings and data shall be submitted for, but not be limited to, the following items:

Proposed installation method and equipment, carrier pipe, casing pipe, casing spacers, casing end seal, controlled low strength material and any other pertinent information concerning construction materials that the Engineer deems necessary for the review of the materials used on the project in accordance with the specifications and drawings.

The Contractor shall submit the number of copies that the Contractor requires plus three copies that the Engineer will retain. The Contractor shall obtain shop drawing approval before any of the work related to that material is performed or any materials are ordered.

All personnel shall be fully trained in their respective duties as part of the trenchless construction crew and in safety.

The Contractor shall submit a work plan two weeks prior to commencing construction activities. At a minimum the work plan shall include trenchless method selected, bore pit size and locations, bore dimensions and locations, daily work hours and working dates. The plan shall also include a project safety and contingency plan for drilling fluid containment and cleanup.

1.4 EXISTING SITE CONDITIONS

The Contractor shall examine the project site and contract documents for the work contemplated. On request, Owner will provide Contractor access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Contractor deems necessary for submission of a Bid. Contractor shall fill all holes, clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Contractor shall comply with all applicable Laws and Regulations relative to excavation and utility locates. Submission of a bid will be considered conclusive evidence that the Contractor has investigated and is satisfied as to the site conditions to be encountered including, but not limited to, the soil types and water table depths.

Any boring logs that were completed for the areas of trenchless construction are included in the plans and specifications. It is understood that such information was obtained and is intended for design and estimating purposes. Its accuracy is not guaranteed. It is made available to Contractors so they may have access to identical subsurface information available to the City. It is not intended as a substitute for personal investigation, interpretations, or judgment of the Contractors as ultimately, the Contractor shall be responsible for the utility installation. The City will not be financially responsible for any changes or differences in the soil conditions or water table depths from the boring logs or records of subsurface investigations provided in the contract documents. Additional payment will not be made to the Contractor in the event site conditions require the Contractor to change their trenchless construction methods.

1.5 PAYMENT

Payments to the Contractor shall be made in accordance with the General Conditions and Section 4 of this special provision.

1.6 ACCEPTANCE

Acceptance of the work shall be in accordance with the General Conditions.

2.0 MATERIALS

2.1 CARRIER PIPE

Carrier pipe shall be of the material and size as required below. All water distribution materials shall meet NSF/ANSI Standard 61—Drinking Water System Components, Health Effects and NSF/ANSI 61 Annex G, NSF/ANSI 372.

- A. Water Main Pipe: (non-restrained and restrained joint): Reference Section 300 Supplemental Standard Specifications for Water Main Construction
- B. Fusible PVC Water Main Pipe: Fusible polyvinylchloride material shall conform to AWWA C900 or C905, ASTM D1784, DR 18, 235 psi and cell classification 12454. Compound formulation shall be in accordance with PPI TR-2/2006. Provide size and pressure class as shown on the drawings equal to connecting pipelines. Fusible PVC pipe shall be allowed for 16 inch and smaller water main.

Pipe shall be manufactured with 100% virgin resin. Pipe shall also have 0% recycled plastics content, and shall not consist of any rework compound, even that obtained from the manufacturer's own production using the same formulation.

Fusible polyvinylchloride pipe shall be extruded with plain ends. The ends shall be square to the pipe and free of any bevel or chamfer. There shall be no bell or gasket of any kind incorporated into the pipe, unless specified otherwise on the drawings.

Fusible polyvinylchloride pipe shall be manufactured in a standard 20', 30', 40', or 45' nominal lengths. Fusible polyvinylchloride pipe shall be blue in color indicating potable water.

Pipe shall be marked per AWWA C900 or AWWA C905, and shall include as a minimum: nominal size, dimension ratio, standard dimension ratio or schedule, AWWA pressure class or rating, AWWA standard designation number, NSF-61 mark verifying suitability for potable water service, extrusion production-record code, trademark or trade name, cell classification 12454 and/or PVC material code 1120 may also be include.

Pipe shall be homogeneous throughout and be free of visible cracks, holes, foreign material, blisters, or other deleterious faults.

Fittings for fusible PVC pipe shall conform to Section 300 Supplemental Standard Specifications for Water Main Construction.

The fusion technician shall be fully qualified by the pipe supplier to install fusible PVC pipe of the types and sizes being used. Qualifications shall be current for the date of installation. Each fusion joint shall be recorded and logged by an electronic monitoring device connected to the fusion machine. The Contractor shall provide the Engineer a copy of the fusion data log and joint reports.

C. HDPE Water Main: Pipe shall be manufactured from a PE 4710 resin listed with the Plastic Pipe Institute (PPI) as TR-4. The resin material shall meet the specifications of ASTM D3350 with a minimum cell classification of PE445574C. Pipe shall be DR 9, 250 psi ductile iron pipe sizes (DIPS). Pipe shall have a manufacturing standard of ASTM D3350 and be manufactured by an ISO 9001 certified manufacturer. The pipe shall contain no recycled compounds except that generated in the manufacturer's own plant from resin of the same specification from the same raw material. The pipe shall be homogeneous throughout and free of visible cracks, holes, foreign inclusions, voids, or other injurious defects.

Fittings: Butt fusion fittings shall be in accordance with ASTM D3261 and shall be manufactured by injection molding, a combination of extrusion and machining, or fabricated from HDPE pipe conforming to this specification. All fittings shall be pressure rated to provide a working pressure rating no less than that of the pipe. The fitting shall be homogeneous throughout and free of visible cracks, holes, foreign inclusions, voids, or other injurious defects.

Electrofusion fittings shall be PE4710 HDPE, Cell Classification of 445574C as determined by ASTM D3350 and be the same base resin as the pipe. Electrofusion fittings shall have a manufacturing standard of ASTM F1055.

Flanged and mechanical joint adapters shall be PE 4710 HDPE, Cell Classification of 445574C as determined by ASTM D3350 and be the same base resin as the pipe. Flanged and mechanical joint adapters shall have a manufacturing standard of ASTM D3261. All adapters shall be pressure rated to provide a working pressure rating no less than that of the pipe. All joints shall be restrained.

Mechanical restraint for HDPE may be provided by mechanical means separate from the mechanical joint gasket sealing gland. The restrainer shall provide wide, supportive contact around the full circumference of the pipe and be equal to the listed widths. Means of restraint shall be machined serrations on the inside surface of the restrainer. Loading of the restrainer shall be by a ductile iron follower that provides even circumferential loading over the entire restrainer. Design shall be such that restraint shall be increased with increases in line pressure. Serrated restrainer shall be ductile iron ASTM A536 with a ductile iron follower; bolts, nuts and rod shall be stainless steel. The restrainer shall have a pressure rating of, or equal to that of the pipe on which it is used. Restrainers shall be JCM Industries, Sur-Grip, or prebid approved equal.

Pipe stiffeners shall be used in conjunction with restrainers. The pipe stiffeners shall be designed to support the interior wall of the HDPE. The stiffeners shall support the pipe's end and control the "necking down" reaction to the pressure applied during normal installation. The pipe stiffeners shall be formed of 316 stainless steel to the HDPE manufacturers published average inside diameter of the specific size and DR of the HDPE. Stiffeners shall be by JCM Industries or prebid approved equal.

Butt Fusion: Sections of polyethylene pipe shall be joined into continuous lengths on the jobsite above ground. The joining method shall be the butt fusion method and shall be performed in strict accordance with the pipe manufacturer's recommendations. The butt fusion equipment used in the joining procedures should be capable of meeting all conditions recommended by the pipe manufacturer, including, but not limited to, temperature requirements of 400 degrees Fahrenheit, alignment, and an interfacial fusion pressure of 75 PSI. The butt fusion joining will produce a joint weld strength equal to or greater than the tensile strength of the pipe itself. Temperature, fusion pressure and a graphic representation of the fusion cycle shall be part of the quality control records.

Provide pressure rated HDPE MJ Adapters for connections between HDPE and PVC pipe sections.

Other: Socket fusion, hot gas fusion, threading, solvents, and epoxies may not be used to join HDPE pipe.

Transitions shall be completed without exceeding the manufacturer's maximum joint deflection or bending radius. The Contractor shall consult the pipe manufacturer to determine if any relaxation period is necessary prior to installing fittings and making any connections.

Personnel performing HDPE fusion joining must be trained and competent in the implementation of the heat-fusion joining procedure and must be qualified by either the pipe manufacturer or the manufacturer's representative.

- D. Gravity sanitary sewer pipe with casing: Reference Section 100 Sanitary Sewer Construction.
- E. Gravity sanitary sewer pipe without casing: Reference Section 100 Sanitary Sewer Construction. Fusible PVC pipe in Section 2.1B green in color for

gravity sewer and HDPE pipe in Section 2.1C are also acceptable materials. The inside of the fusible PVC and HDPE shall be de-beaded.

- F. Sanitary sewer force main: Reference Section 100 Sanitary Sewer Construction. Fusible PVC pipe in Section 2.1B green in color for force main and HDPE pipe in Section 2.1C are also acceptable materials.
- G. Storm sewer pipe: Reference Section 200 Storm Sewer Construction.

2.2 CASING PIPE

Steel casing pipe shall be new pipe material meeting ASTM A 53. Casing pipe under highways, railroad tracks and for 30" casing and larger shall have a minimum wall thickness of 0.375" unless otherwise specified in the plans. All other locations shall have a minimum wall thickness of 0.25" unless the SD DOT or railroad authority requires a greater thickness. Casing pipe shall be ASTM A53, double submerged arc welded, rolled and welded or seamless. Welded joints shall have full penetrating welds.

PVC casing pipe shall meet the requirements of restrained joint PVC in Section 2.1. HDPE casing pipe shall meet the requirements of HDPE water main in Section 2.1. The interior of all fused casing pipes shall have the bead removed.

Steel casing shall be required for all auger boring/jack and bore or open-ended pipe ramming installations. Casing material shall be PVC, HDPE or steel as required on Plans for directional drilling or microtunneling. Casing material shall be steel for all railroad crossings.

The casing size shall be as specified in the plans. If the casing size is not specified then the minimum diameter shall be as specified in the table below:

Carrier	C900 Water Main	C905 Water Main	HDPE 4710 D.I.P.S.	SDR 35 Sewer Main	RCP
Pipe Size	Casing Size	Casing Size	Casing Size	Casing Size	Casing Size
(in)	(in)	(in)	(in)	(in)	(in)
4	8		8	8	
6	12		10	10	
8	14		12	12	
10	16		14	14	
12	20		16	16	24
14		24	18		
15				20	26
16		24	20		
18		28	24		30
20		30	24		
21					36
24		36	28		38
27					42
30		42	36		48
33					51
36			42		54

2.3 CASING END SEAL

Full conical-shaped wraparound seals made of 1/8-inch-thick neoprene rubber shall be provided for each end of the casing pipe. T-304 stainless steel banding straps with a 100 percent nonmagnetic worm gear mechanism and pressure sensitive butyl mastic strips shall be provided to seal edges. End seals shall be model AW Wraparound casing end seals as manufactured by Advance Products & Systems, Inc., Lafayette, LA, model ESW as manufactured by CCI Pipeline Systems or a prebid approved equal.

2.4 CASING SPACERS

Casing spacers shall be constructed of circular T-304 stainless steel segments, which bolt together forming a shell around the carrier pipe. The spacers shall be designed with risers (when needed) and runners to support and center the carrier pipe within the casing pipe and maintain a minimum clearance of 1 inch between the casing pipe inside diameter (ID) and the spacer outside diameter (OD). On carrier pipes with an OD of 16 inches or less, each spacer shall have four riser/runner combinations—two on each half. On carrier pipes with an OD of 20 inches and greater, the number of riser/runner combinations shall be as recommended by the manufacturer, with four being the minimum. T-304 stainless steel bolts and nuts shall be supplied with the spacers.

The shells for carrier pipes with nominal pipe diameters ranging from $4^{\circ} - 24^{\circ}$ shall be manufactured of 8-inch wide 14-gauge T-304 stainless steel. The riser shall be constructed of 10-gauge T-304 stainless steel with a minimum length of 6-inch long.

Abrasion-resistant runners shall have a minimum length of 7 inches. The height of the runner shall be limited to 1" greater than the bell outside diameter.

The shells for carrier pipes with nominal pipe diameters larger than 24" shall be manufactured of 12-inch wide 14-gauge T-304 stainless steel. The riser shall be constructed of 10-gauge T-304 stainless steel with a minimum length of 10-inch long. Abrasion-resistant runners shall have a minimum length of 11 inches. The height of the runner shall be limited to 1" greater than the bell outside diameter.

Abrasion-resistant runners shall be a minimum width of 2 inches, shall be attached to each riser to minimize friction between the casing pipe and the carrier pipe as it is installed. Runner material shall be of glass filled polymer plastic with the following minimum properties: compression strength of 25,000 psi, flexural strength of 32,000 psi, and tensile strength of 22,000 psi. The ends of all runners shall be beveled to facilitate installation over rough weld beads or the welded ends of misaligned or deformed casing pipe.

Interior surfaces of the stainless steel shell shall be lined with EPDM having a minimum thickness of 0.090 inches with a hardness of durometer "A" 85-90. Placement of the spacers shall be a maximum of one foot on each side of the bell joint and one every 6–8 feet minimum thereafter unless otherwise specified.

Casing spacers shall be Model SSI as manufactured by Advance Products & Systems, Inc., Lafayette, LA, model CSS manufactured by CCI Pipeline Systems or a prebid approved equal.

2.5 TRACER WIRE

The components of the tracer wire system for water mains and sanitary force main carrier pipe installed with casing pipe shall be per Section 100 – Sanitary Sewer Construction and Section 300 – Water Main Construction of the City of Sioux Falls Supplemental Standard Specifications. The tracer wire shall be installed with the carrier pipe and tested for conductivity. Tracer wire for water main shall be blue in color and tracer wire for sanitary sewer shall be green in color.

The tracer wire for carrier pipe that is installed without a casing pipe shall be 12 gauge tracer wire with 45 mil HMCO-HDPE jacket, rated for direct burial at 30 volts and minimum 1,150 pound break load. Tracer wire shall be Pro-Trace HDD-CCS PE 45 directional drilling tracer wire, Copperhead SoloShot-EHS or prebid approved equal.

2.6 CONTROLLED LOW STRENGTH MATERIAL

Controlled low strength material (CLSM) shall be used as required in the plans. The CLSM shall be a mixture of cementitious material and water with or without aggregate proportioned to produce a pourable consistency without segregation of the constituents. The CLSM may contain fly ash. The 28-day compressive strength shall be a maximum of 100 psi.

3.0 CONSTRUCTION REQUIREMENTS

No work shall commence until the design and construction procedure has been reviewed in writing by the Engineer. The entire trenchless path shall be reviewed in the field prior to starting. All existing underground utilities shall be marked and identified in the field prior to starting.

3.1 ALIGNMENT AND GRADE

The Engineer will provide stakes for alignment and grade at the surface within 48 hours of notification. The Contractor shall carry line and grade into the trench by means of approved survey methods. At no time shall the Contractor or his employees change the grade without being reviewed by the Engineer. If underground interference is encountered at the assigned grade, the Contractor shall notify the Engineer for alternate alignment. The Engineer shall be allowed to access both ends of the pipe after it is installed to visually inspect the line and grade.

Unless specified otherwise in the plans, the allowable tolerance for sanitary sewer and storm sewer shall be ± 2 inches of proposed line and grade vertically and horizontally and such that at no point does it hold water. The allowable tolerance for water main and force main shall be ± 6 inches (vertically and horizontally) unless specified otherwise in the plans. If tolerances are not met, the Contractor will be allowed to use casing spacers of varying heights to correct the grade. Minimum cover requirements shall be maintained at all times.

3.2 EXCAVATION PITS

Access pits shall be large enough to accommodate the installation of equipment and the pipe but shall not be excessive in order to reduce disturbance to the surrounding area. The Contractor shall provide necessary sheeting and shoring to prevent movement of the existing pavement, soil, utilities or structures outside of the excavation. The pits shall conform to applicable OSHA Standards.

Existing structures and other permanent objects shall be protected by the Contractor. Any damage to these objects shall be repaired by the Contractor at no additional cost to the Owner.

3.3 TRENCHLESS INSTALLATION

The Contractor shall be responsible for monitoring ground movements associated with the work and making appropriate changes in the construction methods to control ground movements and prevent damage to the project, neighboring structures and pavements.

The Contractor shall bore under existing utilities as required to maintain or exceed minimum cover. Transition to vertical runs or change in depth shall be accomplished

without exceeding the maximum bending radius recommended by the pipe manufacturer.

Transition to mainline pipe shall be accomplished without exceeding the maximum bending radius recommended by the pipe manufacturer. Pipe shall be extended as necessary to provide a smooth transition to mainline pipe. Rigid caps shall be installed on the ends of the carrier pipe to keep inside of pipe clean until connected to mainline pipe.

The depth of the crossing shall be verified by the electronic guidance system that is used for the trenchless technology. The Engineer may request the Contractor excavate the pipe if the accuracy of the electronic guidance system is being questioned.

The Contractor shall contact the Engineer immediately if rock/obstruction is encountered and the trenchless construction process needs to stop. The Contractor shall have the option to remove the rock or abandon the casing. If the casing pipe is abandoned then it should be filled with controlled low strength material.

3.4 AUGER BORING (JACK AND BORE)

A method that utilizes a rotating cutting head to form the bore hole and a series of rotating augers inside a casing pipe to remove the spoil. Casing pipe shall be required for all installations. The Contractor shall verify the casing pipe wall thickness is adequate for the anticipated jacking loads. The auger boring machine shall be capable of steering the casing pipe to ensure the tolerances can be met.

The first section of pipe shall have a jacking head that is securely anchored to prevent wobble or variations in alignment during the operation. The driving end of the pipe and intermediate joints shall be protected from damage. Any sections of casing pipe that are damaged shall be replaced. The casing pipe shall be jacked as boring operations continue. If steel casing pipe is used, then the ends shall be welded together to form a water tight seal. Jacking operations shall be conducted to avoid freezing of the casing pipe.

All excavated material shall be removed from the casing pipe and shall not be allowed to accumulate in the pipe. Excessive loss of soil around the casing pie shall be filled with controlled low strength material immediately.

3.5 DIRECTIONAL DRILLING

The directional drilling equipment shall consist of a directional drilling rig of sufficient capacity to perform the bore and pull-back the pipe, a drilling fluid mixing & delivery system of sufficient capacity to successfully complete the boring, a guidance system to accurately guide boring operations and trained and competent personnel to operate the system. All equipment shall be in good, safe operating condition with sufficient supplies, materials and spare parts on hand to maintain the system in good working order for the duration of this project.

Drilling Rig: The directional drilling machine shall consist of a hydraulically powered system to rotate, push and pull hollow drill pipe into the ground at a variable angle while delivering a pressurized fluid mixture to a guidable drill (bore) head. The machine shall be anchored to the ground to withstand the pulling, pushing and rotating pressure required to complete the boring.

The hydraulic power system shall be self-contained with sufficient pressure and volume to power drilling operations. Hydraulic system shall be free of leaks. Rig shall have a system to monitor and record maximum pull-back pressure during pull-back operations.

Drill Head: The drill head shall be steerable by changing its rotation and shall provide the necessary cutting surfaces and drilling fluid jets for the material being drilled.

The Guidance System shall be of a proven type and shall be setup and operated by personnel trained and experienced with this system. The Operator shall be aware of any magnetic anomalies and shall consider such influences in the operation of the guidance system if using a magnetic system. At a minimum, the guidance system shall provide information on the horizontal and vertical location of the drill head along the entire length of the bore. The drilling head shall be steerable by means of an electronic or magnetic detection system. The system shall be able to monitor the point of rotation of the head, offset from the baseline, distance along the baseline and depth of cover.

Mixing System: A self-contained, closed, drilling fluid mixing system shall be of sufficient size to mix and deliver drilling fluid composed of bentonite clay, potable water and appropriate additives. Mixing system shall be able to molecularly shear individual bentonite particles from the dry powder to avoid clumping and ensure thorough mixing. The drilling fluid reservoir tank shall be sized for adequate storage of the fluid. Mixing system shall continually agitate the drilling fluid during drilling operations.

Drilling System: Use a mixture of bentonite clay or other approved stabilizing agent mixed with potable water to create the drilling fluid for lubrication and soil stabilization. Water shall be from a clean source with a pH of 6.0 and/or as per mixing requirements of the Manufacturer. The water and additives shall be mixed thoroughly and be absent of any clumps or clods. The Contractor shall assure that construction activities and materials of construction do not damage the natural environment, or wildlife. The Contractor shall be responsible for any environmental damage which results from his activities. Drilling fluid shall be maintained at a viscosity sufficient to suspend cuttings and maintain the integrity of the bore wall.

Delivery System: The mud pumping system shall have a minimum capacity to supply mud in accordance with the drilling equipment pull-back rating at a constant required pressure. The delivery system shall have filters in-line to prevent solids from being pumped into the drill pipe.

Connections between the pump and drill pipe shall be relatively leak-free. Used drilling fluid and drilling fluid spilled during drilling operations shall be contained and properly disposed of. A containment system shall be maintained around drill rigs, drilling fluid

mixing system, entry and exit pits and drilling fluid recycling system (if used) to prevent spills into the surrounding environment. Pumps and or vacuum truck(s) of sufficient size shall be in place to convey excess drilling fluid from containment areas to storage facilities.

Pipe Rollers: Pipe rollers, if required, shall be of sufficient size to fully support the weight of the pipe during set-up and pull-back operations. Sufficient number of rollers shall be used to prevent excess sagging of pipe.

Pipe Rammers: Hydraulic or pneumatic pipe rammers may only be used with the authorization of Engineer and should never be used with PVC pipe.

Restrictions: Other devices or utility placement systems for providing horizontal thrust other than those previously defined in the preceding sections shall not be used unless approved by the manufacturer prior to commencement of the work. Consideration for approval will be made on an individual basis for each specified location. The proposed device or system will be evaluated prior to approval or rejection on its potential ability to complete the utility placement satisfactorily without undue stoppage and to maintain line and grade within the tolerances prescribed by the particular conditions of the project.

Pipe: Pipe shall be joined together in one length, if space permits. The maximum pipe bending radius as specified by the pipe manufacturer shall not be exceeded during the installation process.

Pilot Bore Hole: Pilot hole shall be drilled along the bore path. In the event that the pilot bore does deviate from the bore path the Contractor may be required to pull-back and re-drill from the location were the deviation started.

Reaming: Minimize potential damage from soil displacement/settlement by limiting the ratio of the bore hole to the pipe size. The size of the back reamer bit or pilot bit, if no back reaming is required, will be limited to the following:

Maximum Pilot or Back-Reamer Bit Diameter When Rotated 360 Degrees

Nominal Inside Pipe Diameter, Inches	Bit Diameter, Inches
< 8	Pipe Dia. + 4
8 to 24	Pipe Dia. x 1.5
> 24	Pipe Dia. plus 12

Contractor will not attempt to ream at one time more than the drilling equipment and mud system are designed to safely handle. Multiple reaming passes may be necessary due to the size of the bore hole.

Pull-Back: After successfully reaming bore hole to the required diameter, Contractor will pull the pipe through the bore hole. In front of the pipe shall be a swivel. Once pull-back operations have commenced, operations must continue without interruption until pipe is

completely pulled into bore hole. During pull-back operations Contractor will not apply more than the maximum safe pipe pull pressure at any time. The pipe entry and staging area shall be graded as needed to support the pipe and prevent damage to the pipe during the pull-back process.

In the event that pipe becomes stuck, Contractor will cease pulling operations to allow any potential hydro-lock to subside and will commence pulling operations. If pipe remains stuck, Contractor will notify Engineer.

Damage Restoration: The Contractor shall restore to original or better condition any areas damaged by heaving, settlement, and separation of pavement, escaping drilling fluid or the directional drilling operations at no additional cost to the Owner.

Failed Bore Paths: If conditions warrant that a bore path needs to be abandoned, then the Contractor shall fill all voids by injecting controlled low strength material into them.

3.6 OPEN-ENDED PIPE RAMMING

A method that involves driving a steel casing pipe with a percussive hammer. The front end of the casing pipe is open-ended. Spoils are removed from the pipe.

The pipe used for ramming shall be free of obvious damage and of good quality. The wall thickness shall meet the manufacturer's recommendation for thickness. Straps will be allowed on joints for casing pipes 12" or larger. However, broken welds are not allowed and straps will not be considered a replacement for broken welds.

The rammer shall be of sufficient size to meet the project length, diameter and soil conditions. The leading edge shall contain a soil shoe that is available from the manufacturer or fabricated on site.

As excavation progresses each pipe shall be rammed forward. Complete and adequate ground support shall be maintained at all times. The external surface of the pipe shall be lubricated to reduce skin friction. The hammer frame shall be positioned to provide a uniformed ramming force on the entire circumference of the pipe. The pipe should be set to ensure the correct alignment and that the launch seal (if needed) is properly designed.

The lubricating system shall be designed to provide lubrication on the inside and outside of the pipe to reduce friction during the ramming process. Lubricating points shall be located by the Contractor and approved by the Engineer. The amount of lubrication applied to the outside of the pipe should be adequate to fill the void. The amount of lubrication applied to the inside of the pipe should be adequate to assist with spoil removal. Spoil removed from casings 30" in diameter or less can be completed with pressurized air and water. Water pressure shall not exceed 300 psi and air pressure shall not exceed 150 psi.

3.7 MICROTUNNELING

A method of pipe jacking using a remote controlled tunnel boring machine. The microtunneling boring machines (MTBM) shall have a shield that can be steered to maintain face stability regardless of the soil conditions that are encountered. The steering mechanism shall be remote controlled to prevent personnel from entering the tunnel. The steering mechanism shall be capable of articulating in both the vertical and horizontal directions.

A slurry system shall be used to balance groundwater and earth pressure. Variable flow slurry pumps shall be used to control slurry system pressure. There shall be a minimum of two flow meters, one on the feed side and one on the return side and pressure control valves. Slurry spoil transportation, earth and groundwater pressure at the face shall be used to control the slurry pressure. The separation system for the slurry spoil shall be of sufficient size to remove solids while the system is running. The discharge shall contain negligible fines.

The MTBM cutter face shall at all times be capable of supporting the full excavated area without the use of ground stabilization and have the capability of measuring the earth pressure at the face and setting a calculated earth balancing pressure. The machine shall have sufficient power under normal operations to crush or cut hard material up to 1/3 diameter of the pipe and up to 30,000 psi compressive strength. The outside diameter of the MTBM shall not exceed the diameter of the casing pipe by more than one inch for nominal pipe diameters less than 24" and two inches for nominal pipe diameters 24" and above.

The MTBM shall be advanced by jacks mounted in a jacking frame and located in the drive shaft. The MTBM shall be moved forward by the jacks advancing a successive string of connected pipes toward a receiving shaft.

The control equipment shall integrate the method of excavation and removal of soil and its simultaneous replacement by a pipe. Line and grade shall be controlled by a guidance system that relates the actual position of the MTBM to a design reference (e.g.. by a laser beam transmitted from the drive shaft along the center line of the pipe to a target mounted in the shield). As each pipe section is jacked forward, the control system shall synchronize spoils removal, excavation, and jacking speeds. The MTBM display equipment shall continuously show and automatically record the position of the shield with respect to the project design line and grade.

4.0 METHOD OF MEASURMENT AND BASIS OF PAYMENT

4.1 TRENCHLESS CONSTRUCTION

The basis of measurement shall be by the lineal foot for the trenchless construction. The measured length of the trenchless construction shall be rounded up to the nearest 1-foot increment. Payment for trenchless construction shall be full compensation for installing the casing pipe or carrier pipe when a casing pipe is not required by the approved trenchless method. Payment shall include all work, labor and materials required for excavation and backfilling of bore pits, protection around the bore pits and all other appurtenances necessary to complete the work. The Contractor is responsible for choosing the trenchless construction method from the approved list. The Contractor will only be paid once for the trenchless construction even if the method they choose doesn't work and they need to change the trenchless construction method.

4.2 CARRIER PIPE

The basis of measurement shall be by the lineal foot for carrier pipe. The measured length of carrier pipe shall be rounded up to the nearest 1-foot increment. Furnishing of carrier pipe shall be paid for at the contract unit price per lineal foot for the types, classes and sizes furnished and installed in accordance with the specifications. Payment for carrier pipe will be full compensation for furnishing of the carrier pipe, installing the carrier pipe in the casing pipe when a casing pipe is required, gaskets, tracer wire and all other appurtenances necessary for the proper installation of the carrier pipe.

4.3 CASING PIPE

The basis of measurement shall be by the lineal foot for casing pipe. The measured length of casing pipe shall be rounded up to the nearest 1-foot increment. Furnishing of casing pipe shall be paid for at the contract unit price per lineal foot for the types, classes and sizes furnished and installed in accordance with the specifications. Payment for casing pipe will be full compensation for furnishing the casing pipe, welding when necessary, casing end seals and casing spacers.

4.4 BORE OBSTRUCTION-SURFACE EXCAVATION

Payment for Bore Obstruction-Surface Excavation will be full compensation for the labor, equipment, and materials needed for removal of the obstruction by excavations from the surface.

A bore obstruction shall be defined as any concrete, rock, boulder, etc., or similar material, which is encountered during the bore that cannot be removed by the boring head with reasonable effort. The Contractor shall be aware that all quantities are estimates. The Contractor will only be paid for obstructions encountered and verified by the Engineer. The bid item quantities are not guaranteed items. Bore obstruction shall

include the removal and replacement of the pavement, excavation to the obstruction, and removal of the obstruction.

In the event that the bore obstruction is located under the interstate, a major arterial or any other location where the Owner determines that excavation of the bore obstruction is not feasible or desirable, the Contractor will be allowed to abandon the bore and change the alignment. The new alignment shall be reviewed by the Engineer. The abandonment of the bore shall be paid for as the amount of controlled low strength material required to fill the pipe and the amount of casing or carrier pipe that was installed, as measured, from the edge of the bore pit. The Contractor will not be paid for trenchless construction of the abandoned bore. Any controlled low strength material necessary to fill the voids of the bore path or casing pipe shall be paid for at the contract unit price for controlled low strength material.

Failed bore paths or bore obstructions that are due to the Contractor selecting a trenchless construction method that does not work for the site conditions or having inadequate equipment will be the responsibility of the Contractor and no additional payment will be made by the Owner.

4.5 BORE OBSTRUCTION- HORIZONTAL EXCAVATION

Payment for Bore Obstruction-Horizontal Excavation will be full compensation for the labor, equipment, and materials needed for removal of the boring head to remove an obstruction. Payment for Bore Obstruction-Horizontal Excavation will be paid only for bore obstructions verified by the Engineer.

A bore obstruction shall be defined as any concrete, rock, boulder, etc., or similar material, which is encountered during the bore that cannot be removed by the boring head with reasonable effort and requires shutdown of the equipment for removal to access the obstruction through the launch pit and installed casing/pipe or other horizontal excavation method. The Contractor shall be aware that all quantities are estimates. The Contractor will only be paid for obstructions encountered and verified by the Engineer. The bid item quantities are not guaranteed items.

Failed bore paths or bore obstructions that are due to the Contractor selecting a trenchless construction method that does not work for the site conditions or having inadequate equipment will be the responsibility of the Contractor and no additional payment will be made by the Owner.

4.6 CONTROLLED LOW STRENGTH MATERIAL

The basis of measurement shall be by the cubic yard for controlled low strength material. The measured volume of controlled low strength material shall be rounded up to the nearest cubic yard increment. Furnishing and installing controlled low strength material shall be paid for at the contract unit price per cubic yard installed in accordance with the specifications. Payment for controlled low strength material will be full compensation for furnishing and installing the controlled low strength material.

STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

STANDARD TITLE VI / NONDISCRIMINATION ASSURANCES APPENDIX A & E

MARCH 1, 2016

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

- 1. **Compliance with Regulations**: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- 2. **Non-discrimination**: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- 4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. **Sanctions for Noncompliance**: In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions**: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or

is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

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

SEPTEMBER 1, 1997

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

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