

**ADDENDUM NO. 1**  
**CDBG 21 P-X-136-2-6225 Water Improvements**  
**Town of Ochlocknee**  
**PROJECT # 2024-18**  
August 19, 2024

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**Bid Date:** 09/04/2023

**Bid Time:** 11:00 A.M.

**Bid Location:** Town of Ochlocknee City Hall, 1044 E. Railroad Ochlocknee, GA 31773

**Owner:** Town of Ochlocknee

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**I. CONTRACT DOCUMENTS**

- A. Table of Contents, replace page ii with the attached revised page ii that adds Section 02791 Horizontal Drilling High Density Polyethylene Pipe.
  - B. Advertisement for Bid (Section 00030) replace page 00030-1 with the attached revised page 1. The bid opening date is revised to September 4, 2024.
  - C. Bid Form, replace with attached revised Bid Form Addendum 1 08/19/24 revising:
    - 1. Date of Bid opening to September 4, 2024.
    - 2. Line Item 9 to include 8" HDPE.
    - 3. Line Item 10 to include 10" HDPE.
  - D. Add attached Section 02791, Horizontal Directional Drilling High Density Polyethylene Pipe.
  - E. Section 00830, Wage Rate Decision, add attached Wage Rate Modification 3 Electrical.
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**END OF ADDENDUM NO. 1**

**IV. Technical Specifications**

**Division 1 - General Requirements**

Measurement and Payment .....	01025
Abbreviations .....	01070
Submittals .....	01300
Temporary Sanitary Facilities .....	01516
Traffic Control .....	01570
Contract Closeout Procedures .....	01701
Final Cleaning .....	01710
Project Record Documents .....	01720
Guarantees and Warranties .....	01730

**Division 2 - Site Work**

Site Preparation .....	02100
Earthwork .....	02200
Earthwork for Utilities .....	02225
Temporary Erosion Control .....	02270
Boring and Jacking .....	02300
Pavement Replacement .....	02511
Concrete Paving .....	02520
Sidewalks, Driveways, Curbs and Gutters .....	02523
Fire Hydrants .....	02645
Water Distribution System .....	02660
Water Service Connection .....	02665
Protection, Relocation and Restoration of Existing Utilities .....	02750
Horizontal Directional Drilling High Density Polyethylene Pipe .....	02791
Horizontal Directional Drilling Fusible Polyvinylchloride Pipe .....	02792
Site Restoration .....	02905
Grassing .....	02931

**V. Attachment “A”**

Georgia Environmental Finance Authority - Supplemental General Conditions

***Attachment “B”***

Georgia Environmental Finance Authority - American Iron and Steel Special Conditions and Information

## ADVERTISEMENT FOR BIDS

Project: **CDBG 21 P-X-136-2-6225 Water Improvements**

OWNER: **Town of Ochlocknee**

Sealed bids will be received by the Town of Ochlocknee, Georgia, for furnishing all materials, labor, tools, equipment, and any other miscellaneous items necessary for the construction of water mains and associated water improvements in Ochlocknee, Georgia.

Bids will be received at the City Hall, 1044 E. Rail Road, Ochlocknee, Ga 31773, until September 4, 2024 by 11:00 A.M. (local time). Any bid received after said time and date of bid opening will not be considered by OWNER. Bids will be publicly opened and read aloud at this time and location. All bids will be evaluated by OWNER and the project will be awarded, if it is awarded, within 20 days of the bid opening.

The Project consists of, but is not limited to the following major elements:

The project is for water main replacement of approximately 8,000 linear feet in length of 6" and 8" diameter pipe. The project will include valves, fire hydrants, fittings, horizontal and directional borings, jack and bore, and associated measures for the water system improvements project.

Time of completion for all work associated with this project shall be 150 consecutive calendar days from the date of a written "Notice to Proceed" from OWNER.

This project is funded in part by a Community Development Block Grant. The work to be performed under this contract is under a program providing direct Federal financial assistance from the department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968 as amended, 12 U.S.C. 1701 U. Section 3 requires that, to the greatest extent feasible, opportunities for employment and training be given to the low income residents of the project area, and contracts for work in connection with the project to be awarded to business concerns which are located in, or owned in substantial part by persons residing in the area of the project. Section 3 Residents and Business Concerns are encouraged to apply. Please contact Ashley Love (229) 547-5188 for any information on any employment, contracting and subcontracting opportunities.

Copies of Contract Documents, Specifications, and Construction Drawings may be obtained at the office of **York & Associates Engineering, Inc.**, 308 E. Water St., Bainbridge, GA 39817, upon payment of a non-refundable cost of \$300.00. Checks shall be made payable to York & Associates Engineering, Inc.

The Information for Bidders, Bid Proposal Form, Form of Agreement, Drawings, Specifications, and forms of Bid Bond, Performance Bond, Payment Bond, Bidders Qualification Forms, and other Contract Documents may be examined at the following locations:

OWNER: **Town of Ochlocknee**

1044 E. Rail Road

Ochlocknee, Ga 31773

Phone No: 229-574-5188

York & Associates Engineering, Inc.

308 E. Water Street

Bainbridge, GA 39817

(229) 248-0141

yorkassociates.net

Email: info@yorkassociates.net

Construction Bulletin

400 S.W. Seventh St.

Stuart, FL 34994, (904) 388-0366, www.cBids.com

<b>BID FORM</b> Revised Addendum 1 08/19/24 <b>Time:</b> 11:00 A.M. <b>Date:</b> Wednesday, September 4, 2024 <b>Place:</b> Town of Ochlocknee, Georgia - City Hall <b>Title of Job:</b> CDBG 21 P-X-136-2-6225 WATER IMPROVEMENTS		<b>Prepared For:</b> <u>Town of Ochlocknee</u> <b>By:</b> <u>York &amp; Associates Engineering, Inc.</u>			
		<b>Contractor</b>			
		<b>Bid Bond</b>			
Item No.	Description	Units	Est No. Units	Unit Price	Item Total
1	Mobilization	LS	1		
2	Silt Fence	LF	10		
3	Temporary & Permanent Grassing	Acre	0.4		
4	Asphalt Pavement Removal and Replacement where asphalt was removed or damaged by construction within the trench limits shown on the Drawings.	LF	140		
5	Concrete driveway replacement	SY	3.3		
6	2" Water Main PVC DR-21	LF	20		
7	6" Water Main PVC DR 18	LF	2,417		
8	8" Water Main PVC DR-18	LF	3,936		
9	Horizontal Directional Drilling with 6" diameter Fusible PVC or 8" HDPE. Complete.	LF	1,265		
10	Horizontal Directional Drilling with 8" diameter Fusible PVC or 10" HDPE. Complete.	LF	314		
11	12" DR-18 FPVC ( Fusible PVC) diameter Horizontal Direction Drilling Casing pipe with 8" DR-18 FPVC Water main Carrier Pipe. Complete.  Or  14" DR-18 FPVC (Fusible PVC) diameter Horizontal Direction Drilling Casing Pipe with 8" DR-18 PVC Water main Carrier Pipe. Complete	LF	58		
12	6" Tapping sleeve.	EA	10		
13	8" Tapping sleeve.	EA	1		

14	6" Gate valve with box.	EA	14		
15	8" Gate valve with box.	EA	2		
16	6" Isolation valve.	EA	3		
17	2" Cap or plug.	EA	2		
18	6" Cap or plug.	EA	7		
19	Reducer, 8" to 6".	EA	7		
20	Bend, 90 degree, 2" diameter	EA	2		
21	Bend, 45 degree, 6" diameter	EA	2		
22	Bend, 90 degree, 6" diameter.	EA	7		
23	Cross 8" X 6"	EA	1		
24	Cross 6" X 6"	EA	1		
25	Tee, 8" X 6".	EA	3		
26	Tee, 8" X 8"	EA	1		
27	Tee, 6" X 6"	EA	3		
28	Furnish and install 5-1/4 3-way Fire Hydrant, includes 6" Gate valve and Box, Locked hydrant tee, Anchor coupling, #57 stone and Thrust Block. Complete	EA	15		
29	Fire hydrant removal and storage at City Barn.	EA	8		
30	3/4" Service lines trenched.	LF	2,180		
31	3/4" Service lines pierced under roads.	LF	1,160		
32	3/4" Service connections, includes tapping saddle, corporation stop, curb stops, and meter box.	EA	72		
33	Tracer Wire inside abandoned Asbestos Water Main on GDOT Right of Way	LF	1,433		
34	Asbestos Warning Sign and Tracer Wire Access Terminal/Box on GDOT Right of Way.	EA	2		
	<b>TOTAL BID AMOUNT=</b>				

Note on Unit Abbreviations: EA = Each  
LF = Linear Feet  
LS = Lump Sum  
SY = Square Yards

**REQUEST for 10-DAY WAGE RATE CHECK**  
(Prior to Bid Opening for Wage Determination)

**REBID**

CDBG Recipient Name Town of Ochlocknee

Requested by Diane Parten, Bob Roberson & Associates

CDBG Grant # 21p-x-136-2-6225

Email Address dianeparten@live.com

Current Wage Rate GA20240060, Mod 2

Wage Classification Heavy/Water-Sewer

County Location of Project Thomas County

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(To Be Completed by DCA)

Most Recent Wage Rate Available GA20240060 MOD 3

Date of Publication 7/26/2024

Date Decision Mailed 8/12/2024

Approving DCA Representative Nina Abbas

Superseded General Decision Number: GA20230060

State: Georgia

Construction Type: Heavy

Heavy Construction, Includes Water and Sewer Lines, and Heavy Construction on Treatment Plant Sites and Industrial Sites (Refineries, Power Plants, Chemical and Manufacturing Plants, Paper Mills, Etc.)

Counties: Appling, Atkinson, Bacon, Ben Hill, Berrien, Calhoun, Camden, Charlton, Clay, Clinch, Coffee, Colquitt, Cook, Decatur, Grady, Irwin, Jeff Davis, Miller, Mitchell, Pierce, Quitman, Randolph, Seminole, Telfair, Thomas, Tift, Turner, Ware and Wayne Counties in Georgia.

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none"><li>Executive Order 14026 generally applies to the contract.</li><li>The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.</li></ul>
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none"><li>Executive Order 13658 generally applies to the contract.</li><li>The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.</li></ul>

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker

protections under the Executive Orders is available at  
<http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/05/2024
1	03/22/2024
2	04/26/2024
3	07/26/2024

\* ELEC0177-003 01/01/2024

CHARLTON COUNTY

	Rates	Fringes
ELECTRICIAN.....	\$ 33.46	14.44

PAID HOLIDAYS: New Year's Day, Memorial Day, 4th of July,  
Labor Day, Thanksgiving Day, The Day after Thanksgiving and  
Christmas Day.

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ELEC0508-010 03/01/2024

APPLING, ATKINSON, BACON, CAMDEN, CLINCH, COFFEE, PIERCE, WARE,  
& WAYNE COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 30.00	4.80%+10.85

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ELEC0613-019 09/02/2023

CLAY & QUITMAN COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 34.50	32%

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ELEC1205-008 06/04/2023

BERRIEN, COOK, DECATUR, GRADY, SEMINOLE, & THOMAS COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 30.10	14%+7.85

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ELEC1316-015 09/01/2023

JEFF DAVIS & TELFAIR COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 30.50	17.5%+8.35

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ELEC1531-008 01/01/2024

BEN HILL, CALHOUN, COLQUITT, IRWIN, MILLER, MITCHELL, RANDOLPH,  
TIFT, & TURNER COUNTIES

	Rates	Fringes
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ELECTRICIAN.....\$ 28.00                      4%+13.45

\* SUGA2012-090 08/11/2012

	Rates	Fringes
CARPENTER (Form Work Only).....	\$ 15.21 **	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 14.11 **	1.78
LABORER: Common or General.....	\$ 11.00 **	0.00
LABORER: Pipelayer.....	\$ 12.00 **	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 17.23	0.00
OPERATOR: Grader/Blade.....	\$ 18.88	1.32
OPERATOR: Loader.....	\$ 15.92 **	0.00
TRUCK DRIVER: Dump Truck.....	\$ 12.00 **	2.14

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

\*\*\*\*\*  
\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

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 (29CFR 5.5 (a) (1) (iii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is

based.

## State Adopted Rate Identifiers

Classifications listed under the ""SA"" identifier indicate that the prevailing wage rate set by a state (or local) government was adopted under 29 C.F.R. 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 01/03/2024 reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

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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 National Office because National Office has 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.

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END OF GENERAL DECISION"

## SECTION 02791

### **Horizontal Directional Drilling High Density Polyethylene Pipe**

#### **PART 1 GENERAL**

##### **1.01 SCOPE OF WORK**

- A. Work covered by this section includes furnishing all labor, materials, accessories, equipment, and service required to properly install carrier pipe by directional bore method for potable water or wastewater systems.

##### **1.02 RELATED WORK**

- A. Section 02732 - Force Mains
- B. Section 02660 - Water Distribution System

##### **1.03 SUBMITTALS**

- A. Contractor Qualifications
- B. Product Data on Pipe
- C. Product Data on Drilling Equipment
- D. Construction Details
- E. Mechanical Breakaway Link

##### **1.04 QUALITY ASSURANCE**

- A. Directional drilling and pipe installation shall be done only by an experienced contractor specializing in directional drilling whose key personnel have at least 5 years experience in this work. Furthermore, contractor shall have installed at least 30,000 feet of horizontal directional drilled utility pipe.

#### **PART 2 MATERIALS**

- A. High Density Polyethylene (HDPE) Pipe
  - 1. HDPE pipe sizes 4 inch and larger shall be a PE 4710/3408 high density, extra high molecular weight polyethylene manufactured from first quality high density polyethylene resin containing no additives, fillers, or extenders. The HDPE pipe shall have an ASTM D3350 cell classification of PE 445574C and shall meet the requirements of AWWA C906 and shall be sized based upon the ductile iron pipe size (DIPS), outside diameter (OD) sizing system. The HDPE pipe shall be a minimum of DR 11, pressure class 160 psi, and shall bear the NSF approval seal.
  - 2. Pipe shall be new pipe and shall be manufactured of virgin material.
  - 3. Pipe shall be homogenous throughout and shall be free of visible cracks, holes,

- foreign material, blisters, or other deleterious faults.
4. Fittings shall be ductile iron mechanical joint meeting the requirements of ANSI/AWWA C110/A21.10 and ANSI/AWWA C111/A21.11.
  5. The pipe shall have fusion welded restrainer ring, follower gland, and a 12 inch (300 mm) stainless steel insert for the mechanical joint connection.
  6. HDPE mains shall be properly sized utilizing the inside diameter of the nominal pipe diameter. If during construction HDPE is substituted for other pipe materials, the Contractor shall verify that the inside diameter of the HDPE is the same or larger than the inside diameter of the pipe originally specified.

**B. Color Coding:**

1. The piping shall be permanently coded to provide service identification. Stripes along the entire outside length of the pipe, 120 degrees apart, shall be made by coextrusion or impregnation in accordance with the following schedule. Fully colored pipe co-extruded from permanently pigmented HDPE is also acceptable.

SERVICE	STRIPED PIPE	SOLID COLORED PIPE
Potable water	Blue Stripes	Blue
Reclaimed water	Purple Stripes	Purple
Wastewater	Green Stripes	Green

**C. Marking on the pipe shall include the following:**

Nominal size and OD base  
Standard material code designation  
Dimension ratio  
Pressure class  
AWWA designation (AWWA C906)  
Material test category of pipe.

**D. Tracer Wire**

1. Pipe shall include two (2) insulated 8 gauge tracer wire. Wire shall be solid copper insulated with HDPE installed along pipe, wrapped around service line stub outs and stubbed into valve boxes for locating purposes. Wire shall be properly spliced together using Buchanan connectors or similar approved method for splicing. Twisting the wires together is not acceptable.
2. Upon the completion of the directional bore, the Contractor shall demonstrate to the Owner or Engineer, that the wire is continuous and unbroken through the entire run of the pipe by providing full signal conductivity (including splices) when energizing

for the entire run in the presence of the Project Representative. If the wire is broken, the Contractor shall repair or replace it.

## PART 3 EXECUTION

### 3.01 INSERTION AND RECEIVING POINTS

- A. The location and number insertion and receiving points shall be planned by the contractor and submitted in writing for approval by the engineer 10 days prior to directional drill.
- B. Before horizontal directional drilling is begun, it will be the responsibility of the contractor to check with various utility companies and determine the location of existing utilities in the vicinity of the work area. The contractor at no cost to the city, if required, will arrange temporary construction easement and/or right of way areas.

### 3.02 INSTALLATION

- A. The Contractor shall install the pipelines by means of horizontal directional drilling. The contractor shall assemble, support, and install the pipeline in the directional drill tunnel.
- B. The tunnel will be 4 inches in diameter greater than the diameter of the pipe being installed.
- C. Before drilling is begun, it will be the responsibility of the Contractor to check with various utilities companies to determine the location of existing utilities in the path of the construction. The Contractor will “pot hole” as needed to verify the location and depth of other utilities. The Contractor at no cost to the city, if required, will pay for any damages to other utilities in constructing the horizontally drilled pipe.
- D. The pulling load on the polyethylene pipe will not exceed the allowable tensile load, or safe pull strength of the pipe. The Contractor will use a Mechanical Breakaway Link to ensure that the safe pull strength of the pipe is not exceeded. Mechanical link pins will break at 40% of allowable tensile load of pipe.
- E. The Contractor shall be responsible for all steerable, fluid lined directional boring operation. Any noticeable surface defects resulting from operation of this boring equipment shall be repaired by the Contractor at his expense. The Contractor is recommended to take preconstruction videos of the construction site to avoid unwarranted claims for damages resulting from the construction.
- F. Horizontal tolerances shall be plus or minimum 2 feet of alignment shown in drawings. Vertical tolerances shall be plus or minus 1 foot of the elevations shown on drawings.

### 3.03 PIPE JOINING - BUTT FUSION PROCEDURE

- A. Pipe shall be joined by butt fusion in accordance with pipe manufacturer directions.

- B. Fusion welds shall be performed by an experienced technician that has been properly trained to meet the pipe manufacturer's procedures. All welds shall meet the manufacturer's recommendations.
- C. As the pipe ends are melted against the heater during the heating period, the molten plastic will swell and form melt beads around the pipe ends. The melt beads should be the same size on both pipe ends and uniformly sized all the way around.
- D. After melting has been completed, the ends should be separated just enough to remove the heater, observed for uniformity of the beads and quickly (within three seconds) brought together with the recommended pressure.
  - 1. If melted plastic sticks to heater, the two ends should not be joined. The ends should be allowed to cool and the procedure started over.
  - 2. Excess pressures should not be used as this will squeeze too much melt out of the fusion area and result in a weakened joint.
- E. The Contractor may do a preliminary pressure test on the completed string of pipe prior to installation. A pressure test shall be required on the completed directional bore prior to final acceptance.
- F. HDPE pipe shall be joined to ductile iron pipe by the use of flange adapters and back-up rings. Flange adapters shall be butt fused to the polyethylene carrier pipe. The face of the flange adapter shall have a serrated sealing face to assist in holding the flange gasket in place. Flange gaskets shall be full-faced neoprene. Back-up rings shall be Class "D" steel ring flanges in accordance with AWWA C207. Flange bolts must span the entire width of the flange joint, and provide sufficient thread length to fully engage the nut.

END OF SECTION