

ADDENDUM ONE (1)

LOUDON UTILITIES LOUDON, TENNESSEE

24-INCH WATER TRANSMISSION MAIN CROSSING TENNESSEE RIVER EDA INVESTMENT NO. 04-79-07491

BID DATE: March 3, 2022
BID TIME: 2:00 P.M., Local Time
ADDENDUM DATE: February 17, 2022

This Addendum is issued to make certain additions, deletions, revisions, clarifications and/or alterations to the Contract Documents, Specifications, Drawings, and other requirements for the subject project. Each Bidder should acknowledge receipt of this Addendum on the Bid form; however, failure to do so does not relieve the Bidder from the requirements contained herein.

I. SPECIFICATIONS:

- A. **Section 00 21 00, Information for Bidders.** On page 3, Paragraph 9, replace 360 calendar days with 450 calendar days.
- B. **Section 00 41 00, Bid.** Project completion time was revised to 450 calendar days. Attached bid form shall be used in lieu of previous one.
- C. **Section 00 42 00, Bid Schedule.** Station numbering for lump sum item no. 2 (TN River Subaqueous Pipeline Crossing) were revised. Bid unit estimates were also revised for item nos. 1b, 4a, 11, 12a, 12b, 13, and 14. Attached bid schedule shall be used in lieu of previous one.
- D. **Section 00 43 80, Bidder Acknowledgment of Contract Time.** Contract time was revised to 450 calendar days. Attached form shall be used in lieu of previous one.
- E. **Section 00 52 00, Contract.** Contract time was revised to 450 calendar days in Paragraph 3. Attached contract shall be used in lieu of previous one.
- F. **Section 00 55 00, Notice to Proceed.** An additional 90 calendar days were added for submittal reviews and material procurement prior to Contract start time, and contract completion time was revised from 360 calendar days to 450 calendar days. Attached Notice to Proceed shall be used in lieu of previous one.
- G. **Section 01 22 00, Measurement and Payment.** The entire section shall be replaced with attached section.

II. DRAWINGS:

- A. **Drawing CA.01, Overall Site Map.** Proposed staging/laydown areas have been added.
- B. **Drawing CU0.4, 24" DIP Water Main, Sta. 42+00 to Sta. 56+00.** The lump sum beginning point revised to Station 46+00.

- C. **Drawing CU0.5, 24" DIP Water Main, Sta. 56+00 to Sta. 70+00.** The lump sum ending point revised to Station 57+00.

END OF ADDENDUM

February 17, 2022

CTI ENGINEERS, INC.
/s/ David L. Jones, P.E.

BID

Project Description: 24-Inch Water Transmission Main Crossing Tennessee River

Proposal of _____

(hereinafter called "Bidder"), doing business as _____
(corporation, a partnership, an individual)

To the Loudon Utilities (hereinafter called "Owner").

Gentlemen:

The Bidder, in compliance with your Advertisement for Bids for the construction of this project having examined the Drawings and Specifications with related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the project in accordance with the Contract Documents, within the time set forth therein, and at the price(s) stated below. This price(s) is to cover all expenses including overhead and profit incurred in performing the work required under the Contract Documents, of which this proposal is a part.

Bidder hereby agrees to commence work under this contract on or before a date to be specified in written Notice to Proceed of the Owner and to fully complete the project within 450 consecutive calendar days thereafter as stipulated in the Specifications. Bidder further agrees to pay as liquidated damages, the sum of \$600 for each consecutive calendar day thereafter as hereinafter provided in the General Conditions.

Bidder acknowledges receipt of the following addenda:

Bidder agrees to perform all the construction of the project complete with appurtenant and accessory work described in the Specifications and shown on the plans for the attached price(s).

The attached price(s) shall include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for.

Bidder understands that the Owner reserves the right to reject any or all Bids and to waive any informalities in the bidding.

The Bidder agrees that this Bid shall be good and may not be withdrawn for a period of 60 calendar days after the scheduled closing time for receiving Bids.

Upon receipt of written notice of the acceptance of this Bid, Bidder will execute the formal contract attached within ten days and deliver a surety bond or bonds as required by the General Conditions. The Bid security attached in the sum of 5 percent of the total Bid is to become the property of the Owner in the event the contract and bond are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the Owner caused thereby.

Respectfully submitted:

By _____

Signature

Title _____

Business Address

ATTEST:

Name _____

(Please Type)

Title _____

(SEAL)

Note: Attest for a corporation must be by the corporate secretary; for a partnership by another partner; for an individual by a Notary.

**BID SCHEDULE
24-INCH WATER TRANSMISSION MAIN CROSSING TENNESSEE RIVER
LOUDON UTILITIES**

Item No.	Description	Unit	Est. No. of Units	Unit Price	Item Total
UNIT PRICE					
1	Ductile Iron Pipe Water Main				
a	24-Inch Push-On Joint	LF	3,134		
b	24-Inch Restrained Joint	LF	1,248		
c	24-Inch Restrained Joint (Through Casing)	LF	190		
d	6-Inch Restrained Joint	LF	19		
e	6-Inch Restrained Joint (Through Casing)	LF	30		
2	Tennessee River Subaqueous Pipeline Crossing STA. 46+00 to STA. 57+00		Lump Sum		
3	Ductile Iron Fittings	TN	4		
4	Valves				
a	24-Inch Butterfly Valves	EA	5		
b	16-Inch Butterfly Valves	EA	1		
c	12-Inch Butterfly Valves	EA	1		
d	8-Inch Gate Valve	EA	1		
e	2-Inch Combination Air Valves	EA	2		
f	1-Inch Air Release Valves	EA	1		
5	Hydrant Assembly	EA	3		
6	Connect to Existing				
a	24-Inch Ductile Iron Pipe	EA	1		
b	16-Inch Ductile Iron Pipe	EA	1		
c	8-Inch Gate Valve	EA	1		
d	6-Inch Gate Valve	EA	1		
7	Water Main Termination				
a	12-Inch Ductile Iron Pipe	EA	1		
8	Bore and Jack Casings - Railroad				
a	36-Inch Steel Casing (Unclassified)	LF	60		
b	36-Inch Steel Casing (Solid Rock)	LF	60		

Item No.	Description	Unit	Est. No. of Units	Unit Price	Item Total
9	Bore and Jack Casings - Roadway				
a	36-Inch Steel Casing (Unclassified)	LF	35		
b	36-Inch Steel Casing (Solid Rock)	LF	35		
c	12-Inch Steel Casing (Unclassified)	LF	15		
d	12-Inch Steel Casing (Solid Rock)	LF	15		
10	Removing and Replacing Pavement	SY	130		
11	Rock and Shoulder Backfill	CY	1,200		
12	Trench Rock Excavation				
a	Base Cost	CY	350		
b	Premium Cost	CY	350		
c	Subaqueous	CY	200		
13	Cleanup, Testing, and Disinfection	LF	5,700		
14	Water Main Grassing	SY	750		
15	Allowances				
a	Soils and Concrete Testing		Allowance		\$7,500
b	Construction Verification Surveying		Allowance		\$7,500
c	Blasting Monitoring		Allowance		\$4,500
d	Subaqueous Pipeline Inspection		Allowance		\$12,500
Additional Work if Ordered by The Engineer					
16	Trench Stabilization	CY	150		
TOTAL BASE BID					\$

Note: Contract will be awarded (if it is awarded) to the responsible and responsive bidder submitting the lowest bid at the sole discretion of the Owner.

BIDDER

DATE

BY

(Signature)

TITLE

ADDRESS

CITY

STATE

ZIP CODE

PHONE

FAX

EMAIL

BIDDER ACKNOWLEDGMENT OF CONTRACT TIME

By signature below, Bidder acknowledges and agrees that the 450-day contract time for substantial completion of the work included in these Contract Documents is either:

1. Sufficient, barring changed conditions, acts of God, or abnormal weather conditions that would justify time extensions; or
2. Insufficient, in which case the Contractor agrees that the price bid includes an allowance for liquidated damages of adequate magnitude to cover the additional time required to complete the work.

Bidder Name _____

Signature _____

Attest:

CONTRACT

THIS CONTRACT, made this _____ day of _____, 20____, by and between Loudon Utilities, hereinafter called "Owner" and _____
_____ doing business as a _____
corporation, individual, or partnership
hereinafter called "Contractor."

WITNESSETH: That for and in consideration of the payments and agreements hereafter mentioned:

1. The Contractor will commence and complete the 24-Inch Water Transmission Main Crossing the Tennessee River.
2. The Contractor will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the completion of the work described herein.
3. The Contractor will commence the work required by the Contract Documents within 10 calendar days after the contract start date of the written Notice to Proceed and will complete the work within 450 consecutive calendar days unless the periods of completion are extended otherwise by the Contract Documents. The Contractor further agrees to pay as liquidated damages, the sum of \$600 for each consecutive calendar day in default thereafter as hereinafter provided in the General Conditions.
4. The Contractor agrees to perform all of the Work described in the Contract Documents and comply with the terms therein for the sum of \$_____ or as shown in the Bid Schedule.
5. The term "Contract Documents" means and includes the following:
 - a. Advertisement for Bids
 - b. Information for Bidders
 - c. Bid
 - d. Bid Bond
 - e. Contract

- f. General Conditions
- g. Supplemental General Conditions
- h. Payment Bond
- i. Performance Bond
- j. Notice of Award
- k. Notice to Proceed
- l. Change Order(s)
- m. Drawings prepared by CTI Engineers, Inc., numbered _____ through _____
- n. Specifications prepared or issued by CTI Engineers, Inc., dated _____ 20__
- o. Addenda:
 - No. _____, dated _____, 20__
 - No. _____, dated _____, 20__
 - No. _____, dated _____, 20__

6. The Owner will pay to the Contractor in the manner and at such times as set forth in the General Conditions such amounts as required by the Contract Documents.

7. This Contract shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Contract in four (4) copies each of which shall be deemed an original on the date first above written.

OWNER:
 LOUDON UTILITIES
 By _____
 Name _____
 (Please Print or Type)
 Title _____

WITNESS:

Name _____
(Please Print or Type)

Title _____

(SEAL)

CONTRACTOR:

By _____

Name _____
(Please Print or Type)

Address _____

ATTEST:

Name _____
(Please Print or Type)

Title _____

(SEAL)

Note: Attest for a corporation must be by the corporate secretary; for a partnership by another partner; for an individual by a Notary.

SECTION 00 55 00
NOTICE TO PROCEED

To: _____

Project Description: The site of the proposed work is located in Loudon, Tennessee. The project consists of the installation of approximately 6,000 linear feet of 24-inch water transmission main crossing the Tennessee River, with associated incidentals and appurtenances.

You are hereby notified to commence work in accordance with the Agreement dated _____, 20__, on or before _____, 20__ (including 90 calendar days for submittals review, material procurement, etc), and you are to complete the work within 450 consecutive calendar days thereafter. The date of completion of all work is therefore _____, 20__.

Dated this _____ day of _____, 20__.

LOUDON UTILITIES

By _____

Name _____

Title _____

ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed is hereby acknowledged by _____
_____, this the
_____ day of _____, 20__.

By _____

Name and Title _____

SECTION 01 22 00

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplemental Conditions or General Provisions and other Division 1 specification sections, apply to this section.

1.2 SUMMARY

- A. This section specifies administrative and procedural requirements for unit prices.
 - 1. A unit price is an amount proposed by Bidders and stated in the Bid Schedule as a price per unit of measurement for materials or services that will be added to or deducted from the Contract Sum by Change Order in the event the estimated quantities of work required by the Contract Documents are increased or decreased.
 - 2. Payment will be made only for those items listed in the Bid Schedule. All other items not specifically listed shall be deemed incidental and cost of same shall be included in other items of work.
 - 3. Unit prices include all necessary material, overhead, profit and applicable taxes.
 - 4. Refer to individual specification sections for construction activities requiring the establishment of unit prices. Methods of measurement and payment for unit prices are specified in Part 3 of this section.
- B. Specification sections referenced in the Bid Schedule contain requirements for materials and methods described under each unit price.

PART 2 - PAYMENT

2.1 PARTIAL PAYMENT

- A. Partial payment may be made for stored material on site, providing:
 - 1. The material meets the specifications outlined elsewhere in these documents.
 - 2. The material is stored according to the recommendations of the Engineer and/or manufacturer.
 - 3. The Contractor submits copies of all shipping invoices for the stored materials delivered to the site.

PART 3 - MEASUREMENT AND PAYMENT

3.1 MEASUREMENT AND PAYMENT

- A. Measurement and payment for all items of work shown on the Drawings, specified, or otherwise required or necessary for complete, working systems shall be made at the lump sum and unit prices listed in the Bid Schedule. No separate payment shall be made for items of work, services, fees, or equipment not specifically listed, but payment for those items shall be included in the payment for items listed.

3.2 CASH ALLOWANCES

A. General

1. The Contractor shall include in the Bid Total all allowances stated in the Contract Documents. These allowances shall cover the net cost of the services provided by a firm selected by the Owner. The Contractor's handling costs, labor, overhead, profit and other expenses contemplated for the original allowance shall be included in the items to which they pertain and not in allowances.
2. No payment will be made for nonproductive time on the part of testing personnel due to the Contractor's failure to properly coordinate testing activities with the work schedule or the Contractor's problems with maintaining equipment in good working condition. The Contractor shall make all necessary excavations and shall supply any samples of materials necessary for conducting compaction and density tests.
3. No payment shall be provided for services that fail to verify required results.

- B. Should the net cost be more or less than the specified amount of the allowance, the Contract will be adjusted accordingly by change order. The amount of change order will not recognize any changes in handling costs at the site, labor, overhead, profit and other expenses caused by the adjustment to the allowance.

C. Documentation

1. Submit copies of the invoices with each periodic payment request from the firm providing the services.
2. Submit results of services provided which verify required results.

D. Schedule of Cash Allowances

1. Soils and Concrete Testing: Allow the amount provided in the Bid for the services of a geotechnical engineering firm and testing laboratory to verify soils conditions including trench excavation and backfill, and similar issues and for the testing of concrete cylinders for poured in place concrete.
2. Construction Verification Surveying
 - a. Allow the amount provided in the Bid for construction surveying by an

independent surveying firm, selected by the Owner, to perform horizontal and vertical alignment checks at the discretion of the Engineer.

- b. This allowance is solely for the use of the Engineer for verification of the Contractor's reference points, centerlines and work performed. The presence of this cash allowance in no way relieves the Contractor of the responsibility of installing reference points, centerlines, temporary bench marks or verifying that the work has been performed accurately.
3. **Blasting Monitoring:** Allow the amount provided in the Bid for the services of an independent, qualified specialty subcontractor to monitor the blasting, when directed by the Engineer.
4. **Subaqueous Pipeline Inspection:** Allow the amount provided in the Bid for the services of an independent, qualified specialty subcontractor to inspect pipeline installations, when directed by the Engineer in accordance with Section 02490 of these Specifications.

3.3 TRENCH EXCAVATION AND BACKFILL

- A. No separate or additional payment will be made for any special or unique method, means, techniques or equipment necessary for the Contractor's compliance with these Specifications, regulatory requirements, permits, laws or regulations which govern this Project.
- B. **Trench Excavation:** No separate payment will be made for trench excavation. All costs shall be included in the unit price bid for the item to which it pertains.
- C. **Sheeting, Bracing and Shoring:** No separate payment will be made for providing any sheeting, bracing and shoring.
- D. **Trench Rock Excavation**
 1. Rock excavation shall be paid for as an extra in addition to payment for pipe provided for elsewhere in these Specifications. Payment will be made for the measured quantity of rock excavated, at the sum of the unit prices for Trench Rock Base Cost and Trench Rock Premium Cost.
 2. The unit price for Trench Rock Base Cost is for the normally anticipated cost of rock excavation, the cost of additional bedding and backfill material as specified and all costs incidental thereto.
 3. The unit price bid for Trench Rock Premium Cost shall be for all additional costs for rock excavation which, in the opinion of the Contractor, are in excess of the Base Cost, including but not limited to extra blasting protection, closer grouping of blasting holes, more detonator caps, more caution, etc. The Contractor shall not bid less than zero (bid a deduct) for the Trench Rock Premium Cost. Any Bids containing a deduct will be declared non-responsive and rejected by the Owner.
 4. The unit price bid for Subaqueous Rock Cost shall be for all costs associated with removal of subaqueous rock below the water surface of the Watts Bar Lake/Tennessee River. This cost includes but is not limited to the means, methods,

- equipment, and labor associated with removal, transportation, and disposal of the subaqueous rock.
5. The maximum allowable volume of rock excavation for payment shall be based on a trench width equal to the outside diameter of the pipe barrel plus 18-inches, but not less than 36-inches, and depth of rock on the pipe centerline, from the top of the rock to the bottom of the rock or the specified bottom of the trench, whichever has the higher elevation.
 6. The Engineer must be given reasonable notice to measure all rock.
 7. No allowance shall be made for excavating to extra widths for construction of manholes or other appurtenances, for excavating to sloping sides, or for excavations made necessary by the physical limitations of the Contractor's equipment. Cost of such additional rock excavation shall be included in the unit price bid for the item to which it pertains.
 8. Payment for blasting monitoring shall be made from the "Blasting Monitoring" cash allowance. A fee must be agreed upon by the Engineer prior to the Contractor employing an independent, qualified specialty subcontractor to monitor the blasting. If the Contractor employs the specialty subcontractor prior to the Engineer's approval of the fee, all such costs are subject to non-reimbursement.
- E. Dewatering Excavations: All costs of equipment, labor and materials required for dewatering shall be included in the price bid for the item to which it pertains.
- F. Trench Foundation and Stabilization
1. No payment for trench stabilization shall be authorized until after the trench has been dewatered. If the pipe is installed in an inadequately prepared trench bottom, the Engineer shall notify the Contractor in writing of the deficiency and will not authorize payment for that portion of that length of pipe which was improperly installed.
 2. Payment for trench stabilization shall be made on the basis of the amount authorized and the unit price bid for Trench Stabilization. Payment shall include all costs for the removal and disposal of the unsuitable material and replacement with crushed stone. No additional payment will be made for material required for specified bedding.
- G. Bedding and Haunching
1. No additional payment will be made for additional trench depth.
 2. No separate payment will be made for material used to provide specified bedding. The cost of all bedding materials shall be included in the unit price bid for the item to which it relates, except for trench stabilization.
 3. The cost for providing Type 3 bedding for restrained joint pipe shall be included in the unit price bid for restrained joint pipe.
 4. No additional payment will be made for improved bedding required to compensate for over excavation of the trench.

H. Initial Backfill

1. No separate payment shall be made for initial backfill.
2. No separate payment shall be made for drying out the initial backfill material in order to meet the compaction requirements.
3. No separate payment shall be made for the adding of moisture to the initial backfill materials in order to meet the compaction requirements.
4. No separate payment shall be made for providing select material if the insitu material cannot meet the compaction requirements.

I. Final Backfilling

1. No additional payment will be made for additional material when excavated materials are used.
2. No separate payment shall be made for drying out the final backfill material in order to meet the compaction requirements.
3. No separate payment shall be made for the adding of moisture to the final backfill materials in order to meet the compaction requirements.
4. No additional payment will be made for providing select material if the insitu material cannot meet the compaction requirements.

J. Additional Material: No separate payment will be made for additional earth or fill materials imported to the Project site.

K. Road and Shoulder Backfill: All costs for providing crushed stone for bedding, haunching, and backfill beneath the roadway surface and within four feet from the edge of the pavement shall be included in the unit price bid for Road and Shoulder Backfill. Payment will be paid separately, on a per cubic yard basis at the unit price bid for Road and Shoulder Backfill, but only where the water main centerline is under or within four feet of the pavement edge. Where the water main centerline is beyond four feet from the edge of pavement, no additional payment will be made.

3.4 BORE AND JACK CASINGS

- A. Payment for casing shall be made only at the completion of all work specified for the casing installation. No partial payment shall be made for the construction of the casing.
- B. Casing pipe may be included in Partial Payment Requests as stored materials, if the casing pipe is stored at the Project site. Casing pipe which has been properly installed, but has not yet been paid for as installed casing, may also be included as stored materials.
- C. In the event that rock is encountered during the installation of the pipe casing which, in the opinion of the Engineer, cannot be removed through the casing then the Engineer may authorize the Contractor to complete the crossing by another method via a change order.
- D. No additional payment shall be made for rock excavation through the casing. All costs for solid rock excavation through the casing shall be included in the unit price for Bore and Jack Crossings (Solid Rock).

- E. Payment for pipe in casing shall be made only at the completion of all work specified for the pipe installation. Payment for pipe in the casing shall be made only at the one unit price bid for the appropriate crossing.
- F. No additional payment shall be made for increased casing diameter in order to accommodate restrained joint requirements of the pipe manufacturer. Payment will be made based on the diameters listed in the table in Section 02229, Article 2.01, Paragraph B.
- G. All costs for flagmen that may be required by the Railroad shall be paid by the Contractor.

3.5 REMOVING AND REPLACING PAVEMENT

- A. Payment for removing and replacing pavement will be made as a separate item based on the measured quantity replaced at the unit price in the Bid. The unit price bid shall include all costs associated with removing and replacing pavement, including providing select backfill if necessary, traffic control and temporary measures for maintaining traffic.
- B. Payment shall be made only for that length for which the pipeline is constructed underneath the pavement as shown on the Drawings.
- C. Payment for soils testing shall be made from the "soils and concrete testing" cash allowance. No payment shall be made for tests that fail to verify required results.
- D. No additional payment will be made for removing and replacing damaged adjacent pavement.
- E. Costs for removal and replacement of sidewalks and curb and gutter shall be included in the unit price bid for the item to which it pertains.
- F. No separate payment shall be made for pavement removal and replacement associated with abandonment of existing water mains or installation of water services.

3.6 WATER MAINS AND ACCESSORIES

- A. Existing Utilities and Obstructions
 1. No separate payment will be made for any delay or extra cost encountered by the Contractor due to protection, avoidance or relocation of existing utilities, mains or services shown or not shown on the Drawings.
 2. Horizontal Conflict: No separate payment shall be made for changing the horizontal alignment of the water main to avoid a horizontal conflict, except where authorized for additional fittings and/or pipe.
 3. Vertical Conflict: No separate payment shall be made for lowering the water main alignment to avoid a vertical conflict, except where authorized for additional fittings.
- B. Construction Along Highways, Streets and Roadways: No separate payment shall be made for traffic control or maintaining highways, streets, roadways and driveways.

C. Location and Grade

1. No separate payment shall be made for any surveying performed by the Contractor to establish or confirm the location of reference points, right-of-ways or easements or location and grade of the water main.
2. The "Construction Verification Surveying" cash allowance is solely for the use of the Engineer for verification of the Contractor's reference points, centerlines and work performed. The presence of this cash allowance in no way relieves the Contractor of the responsibility of installing reference points, centerlines, temporary bench marks or verifying that the work has been performed accurately.

D. Laying and Jointing Pipe and Accessories

1. Payment for water main shall be made for the quantity provided. Measurement for payment shall be made along the centerline of the pipe, through valves and fittings. No payment shall be made for sections of pipe which are not installed.
2. Fittings: The unit price bid for fittings shall include the costs of fittings and joint accessories and the cost of all related blocking. Weight of fittings for payment shall be AWWA C 110 standard weight for all mechanical joint ends and AWWA C153 for all restrained joint ends and shall not include the weight of bolts, glands, or cement lining.
3. Hydrant Assembly: Payment for hydrant assemblies shall be made at the unit price bid. Payment for the associated valve, valve box, piping, fittings, thrust blocking, anchor couplings, and all accessories detailed on the Drawing shall be included in the unit price bid for Hydrant Assembly.
4. Valves
 - a. The unit price bid for valves shall include the cost of providing the valve, extension stem, valve box, valve marker, and all related items.
 - b. The cost for providing the flange by restrained joint adapters shall be included in the unit price bid for in-line valves.
5. No additional payment will be made for replacement of defective materials.
6. No separate payment shall be made for detection tape or tracer wire.
7. The unit price bid for automatic air release valves shall include the cost of providing the air valve, gate valve, tapping saddle and fittings, precast concrete product, frame and cover, crushed stone and all related items as shown on the Drawings.
8. No payment will be made for cutting and beveling pipe.
9. Solid Sleeves: Payment for solid sleeves shown on the Drawings and specified shall be made at the unit price bid for fittings. No payment shall be made for fittings provided due to the Contractor's sequence of construction, layout problems or repairs, except for those shown on the Drawings or specified.

- E. Connections to Existing Water Mains: The cost of all labor necessary for making the connection to existing water mains with solid sleeves shall be included in the unit price bid for connections to existing water mains. All fittings and valves will be paid at their

respective unit price bid.

- F. Thrust Restraint: No separate payment will be made for thrust restraint. The cost of all required work shall be included in the unit price bid for related items.
- G. Water Main Termination: Payment for water main terminations shall be at the unit price included in the bid. Payment shall include providing all pipe, thrust restraint, fittings (except the main line tee), and caps. Valves will be paid separately at the appropriate unit price.
- H. Abandon Existing Water Main: No separate payment will be made for abandoning existing water mains. The cost of all work shall be included in the unit price bid for related items.
- I. All costs related to the implementation of the easement and permit stipulations shall be included in the unit price bid for the item to which it pertains.
- J. Clean-Up, Testing, and Disinfection
 - 1. Payment for clean-up, testing, and disinfection shall be made at the unit price provided in the Bid for Clean-Up, Testing, and Disinfection. Any other cost for labor, material and equipment required shall be included in the unit price bid for Water Main.
 - 2. No payment for clean-up, testing and disinfection shall be made for any length of line unless pressure testing and disinfection has been successfully completed, main has been disinfected and clean up has been completed to the satisfaction of the Engineer for that segment of line for which payment is being requested.
- K. Water Main Grassing
 - 1. The unit price bid for Water Main Grassing shall be for one-time clean-up of the pipeline route and grassing, whether permanent, temporary, or both. Any other costs for labor, materials, and equipment for clean-up and grassing of the disturbed area shall be included in the unit price bid for the item to which it pertains.
 - 2. No additional payment will be made for those lengths of pipeline where the Contractor must reseed due to inadequate watering and maintenance; loss of seeds caused by site erosion, e.g., wind and rain; inadequate germination of the seeds; inadequate coverage/density; providing permanent species at the appropriate season after temporary grassing has been performed.
 - 3. No additional payment will be made for providing a temporary species of grass where the seasonal limitations do not allow for the proper germination of a permanent species of grass. Any additional cost anticipated for sowing a temporary species shall be included in the price bid for the item to which it pertains.
 - 4. Measurement for payment for Water Main Grassing shall be along the centerline of the pipeline, through fittings and valves. The length of pipe constructed under pavement, through casings and free bores, and the length of pipe associated with water services, shall not be included in quantities for payment for Water Main Grassing.
 - 5. No payment will be made for any length of water main where the clean-up and grassing operation is not maintained within 2,000 feet of the pipe laying operation.

3.7 TENNESSEE RIVER SUBAQUEOUS PIPELINE CROSSING (STA. 46+00 - STA. 57+00)

Payment for the Tennessee River Subaqueous Pipeline Crossing shall be at the lump sum price bid. Payment shall include costs for all labor, equipment, materials, and incidentals necessary to provide a fully complete and functional installation. Subaqueous rock excavation will be paid separately at the appropriate unit price in the Bid. No other unit prices including, but not limited to, Trench Rock Excavation, Ductile Iron Pipe, Bore and Jack Casings, Fittings, Flushing Hydrant Assemblies, will be paid for this portion of the work.

END OF SECTION