

CITY OF EAST PROVIDENCE WATER MAIN CLEANING AND LINING PHASE V RFP EP23/24-26

ADDENDUM # 2

BID OPENING THURSDAY JUNE 20, 2024 AT 2:00 PM

The following revisions, clarifications, additions and/or deletions, are hereby made a part of the Bid Documents for the City of East Providence's Water Main Cleaning and Lining project, RFP EP23/24-26.

Specifications:

- 1. Bid Form shall be **DELETED** in its entirety and **REPLACED** with the attached Bid Form. See Attachment 1.
- Section 01000 General Specifications, INSERT the following text after Paragraph 1.9 Part B: "C. Flaggers will be permitted when East Providence Police Department traffic detail officers are not available."
- 3. Section 01000 General Specifications, **DELETE** Paragraph 1.27 in its entirety and **REPLACE** with the following: "1.27 VALVE IDENTIFICATION, Not Applicable".
- 4. Section 01025 Measurement and Payment, INSERT the following text after Paragraph 1.2 Part R.d.: "e. The City shall pay East Providence police details directly. Contractor shall provide flaggers in the event police detail is unavailable, the cost of which will be paid using the Allowance item."
- 5. Section 02615 Ductile Iron Water Mains and Appurtenances, **DELETE** Paragraph 2.1 Part J in its entirety.
- 6. Section 02615 Ductile Iron Water Mains and Appurtenances, **DELETE** all references to ARRA and **REPLACE** with American Iron and Steel (AIS).
- Section 02650 Water Service Lines, DELETE Paragraph 2.1 Part B and REPLACE with the following: "B. All corporation stops for ³/₄-inch copper water service lines shall be pack joint fitting such as Ford FB1000-3-NL CC taper thread or approved equal."
- 8. Section 02650 Water Service Lines, **DELETE** Paragraph 2.1 Part C and **REPLACE** with the following: "C. All corporation stops for 1-inch copper water service lines shall be pack joint fitting such as Ford FB1000-4-NL CC taper thread or approved equal."

- Section 02650 Water Service Lines, DELETE Paragraph 2.1 Part D and REPLACE with the following: "D. All corporation stops for 2-inch copper water service lines shall be pack joint fitting such as Ford FB1000-7-NL CC taper thread or approved equal."
- 10. Section 02700 Cleaning and Lining Water Mains, DELETE Paragraph 3.1 Part E and REPLACE with "E. At no time shall there be more than 5,000 linear feet of water main out of service at one time, provided that no customer is on temporary bypass for longer than 90 days. Should the Contractor request an increase in this limit during construction, it will be subject to review and approval by the City."
- 11. Section 02700 Cleaning and Lining Water Mains, **DELETE** Paragraph 3.5 Part A in its entirety.
- 12. Section 02700 Cleaning and Lining Water Mains, **DELETE** Paragraph 3.13 Part A.2. and **REPLACE** with the following: "2. One color digital video disk (DVD) shall be submitted to Owner for post lining television inspection, with accompanying log."
- 13. Section 02750 Temporary Bypass Piping and Services shall be **DELETED** in its entirety and **REPLACED** with the attached Section 02750. See Attachment 2.

Below are clarifications to questions asked during the pre-bid conference as well as questions submitted in writing by prospective bidders.

Pre-Bid Conference Questions/Clarifications:

1. The specifications state that no more than 2,500 feet of water main can be out of service at any one time. This limit will not allow for the project to be completed within the schedule required. Can this limitation be removed?

A limit on the amount of water main that is taken out of service at a given time is specified in the bid documents to minimize reduction in service in the distribution system. Given the scope and schedule requirements of the project, the Contractor will be permitted up to 5,000 feet of water main out of service at any one time provided that no customer is on temporary bypass for longer than 90 days. Should the Contractor request an increase of this limit during construction, it will be subject to review and approval by the City. Section 02700 – Cleaning and Lining Water Mains has been revised accordingly.

2. Can you clarify the quantity for temporary bypass piping by size? Is 6-inch temporary bypass going to be required? There is no bid item provided for 6-inch temporary bypass.

A unit bid price has been added for 6-inch temporary bypass. The Bid Form has been revised accordingly.

3. The drawings have a notation to remove and reset hydrant and furnish and install new hydrant in the same location. Can you please clarify?

The notation is a typo. The condition of that hydrant will be evaluated during construction and the appropriate direction will be provided to the Contractor. Unit bid items are provided for both removing and resetting existing hydrants and furnishing and installing new hydrants. The appropriate bid item will be used for payment to the Contractor. 4. Are valves to be installed at the tee or on the property line at intersections? If valves are to be installed at the tee where existing valves are on the property line, does the section of pipe between old and new valves get lined or replaced?

The City intends for valves to be installed at the tee. The decision to clean and line or remove and replace water main between new and old valves will be determined in the field, and the work will be paid for using the appropriate unit bid items.

5. What City permits will the Contractor be required to pay?

City permit fees will be waived for this project. If there are fees for permits the Contractor is required to obtain, such as RIDOT Utility Permit, they shall be borne by the Contractor.

6. Does the City have an estimated cost for this project?

The City has been awarded approximately \$20 million in a Drinking Water State Revolving Fund (DWSRF) loan from the Rhode Island Infrastructure Bank. The quantities on the Bid Form have been adjusted based on the available funding for this project, and the revised quantities do not necessarily reflect all of the work depicted on the Drawings. The City reserves the right to eliminate any portion of the work shown on the Drawings for any reason, including for project budgeting purposes.

7. What is the process for requesting product substitutions?

Requests for substitutions can be made by email to the Engineer at bblanchard@parecorp.com.

Written Questions/Clarifications:

8. Can you provide additional distribution system mapping, such as services and hydrant branches, so that bidders can identify feed hydrants for temporary bypass and large services (commercial services and fire supply lines) that will need to be connected to bypass.

The City's distribution mapping does not include services. Water service tie cards will be made available to the selected Contractor. A list of large services that require connection to temporary bypass is provided as an attachment to Section 02750 – Temporary Bypass Piping and Services. Bidders should note that this list may be incomplete, and the number of commercial and fire supply services will be verified during construction. Bid items have been added for the connection of commercial and fire supply services to the temporary bypass system.

9. Valve Identification: section 01000, page 10, para. 1.27. Para. A says the valve schedule has to be completed and submitted for approval "not less than 120 days prior to startup". This is probably not possible if other work is intended to be completed by November of 2024. Para B talks about placement of ID tags on the valve operator. This requirement doesn't seem applicable for this project.

A valve schedule and identification tags on valve operators are not required for this project.

10. Police detail bid item but nothing for payment of flaggers. Although filling detail requests has not been a problem in the past it may during the term of this project considering the detail demand as

result of the Washington Bridge construction. Please consider a separate flagger allowance or specifically allow flaggers to be paid under item 61, Traffic Control.

Flaggers will be permitted when police detail is not available for traffic control. Flaggers will be reimbursed under the Traffic Control allowance bid item.

11. What permits/licenses are required to complete this project? Is it one permit per street or one per excavation? How does it work? What is the cost of permit? Are sidewalk permits required? If so, what is the cost? Are no parking sign permits required? If so, what is the cost?

City permit fees will be waived for this project.

12. Section 01000-11 1.30 - hours of construction from 7am to 5pm. Can we work the entire time frame or do we need to select 8 hours within that time frame?

The Contractor is not restricted to an 8-hour workday; however, allowable work hours in State roadways will be subject to RIDOT approval. The typical allowable workday in RIDOT roadways is 9:00 – 3:00; however, extended work hours can be requested from RIDOT in the Transportation Management Plan (TMP) permitting process.

13. Section 02700-5E After cleaning, owner & contractor shall inspect the pipe. Does this mean we inspect with a flashlight and make sure the pipe is clean or will CCTV cameras need to be used?

CCTV inspection is only required after water main lining is complete and will not be required following cleaning. Contractor is responsible for final cement mortar lining meeting project specifications.

14. 02750-2 Top of page – Temporary hydrants shall be on same side of the street within 25' of existing hydrant. In residential areas, can we put temporary hydrants directly across the street from existing hydrants? This helps keep the 4" bypass away from the lining access pits in some areas.

Installing temporary hydrants on the opposite side of the street will be permitted but shall be proposed on Contractor's temporary bypass plans. Contractor is responsible for designing temporary bypass layout, which will be subject to the City's approval. Section 02750 – Temporary Bypass Piping and Services has been revised accordingly.

15. 01010-2 H - RIDOT is planning road restoration project for Willett Ave with final paving in the late summer of 2024. Please confirm this paving is a separate project/contract and low bidder is not responsible for this paving.

Pavement restoration being performed by RIDOT includes mill and overlay of surface pavement. Contractor is still required for temporary and permanent patching as well as restoring concrete road base.

16. 02650 – Water Service Lines - Is any work being performed at #49 & # 57 10th Street? How does contractor get paid for transferring services shown on Burgess Avenue?

It is unclear what properties are referenced by this question. No properties are identified as #49 and #57 on Tenth Street. Services, corporations, and curb stops and boxes shall be paid using the applicable unit bid items provided.

17. How does the contractor get paid for tap holes and/or connections required for large diameter domestic/fire services not shown on the drawings? Consider a bid item for temporary connections below grade (tap hole) to connect large services over 2", large fire services 4" & 6", connections required when there is no access for interior connections such as in a bank or apartment building for small and large services.

Unit bid items have been added for large diameter temporary connections. The Bid Form and Section 02750 – Temporary Bypass Piping and Services have been revised accordingly.

Attachments:

- 1. Bid Form (revised by Addendum No. 2)
- 2. Section 02750 Temporary Bypass Piping and Services (revised by Addendum No. 2)



CITY OF EAST PROVIDENCE CLEANING AND LINING PHASE V WATER SYSTEM UPGRADES BID FORM REQUEST FOR PROPOSAL RFP# EP23/24-26 BID OPENING THURSDAY, JUNE 20, 2024 at 2:00 PM

The undersigned bidder, being familiar with local conditions affecting the cost of the work, hereby proposes to provide all necessary labor, materials, equipment and incidental items necessary to do all the work called for in the Specifications and in accordance with the Contract Documents.

A mandatory pre-bid conference was held on Tuesday, May 7, 2024 at City Hall, 145 Taunton Avenue, East Providence, Conference Room 306 at 10:00 AM. Questions on the bid are due by Friday, May 31, 2024 at 4:00 PM.

The undersigned further understands that the quantities of work as shown are approximate only and are subject to increase or decrease and offers to do the work whether the quantities are increased or decreased, at the unit prices stated. Davis–Bacon wages apply to this proposal.

All prices must be written in words and figures. In case of discrepancy, the amount shown in words will govern.

Bidder acknowledges receipt of the following addendum:

At the time of the opening of bids, the bidder shall have inspected the sites of the work to familiarize himself with the conditions relating to the work under the contract.

No Bidder may withdraw their Bid within sixty (60) days following the closing time for receipt of Bids.

Bidder hereby agrees to begin work within ten (10) days after the date of the NOTICE TO PROCEED, unless otherwise specified or permitted by the CITY, and shall complete the work under the provisions of the Contract within 60 calendar days.

The undersigned bidder submits herewith Bid Security in the form of a Bid Bond or a Certified Check, in favor of the City of East Providence, in the amount not less than five (5) percent of the total amount bid in dollars, and agrees and consents that, if he is the successful bidder, the Bid Security shall be forfeited to the City of East Providence as liquidated damages, if the required Contract and Surety Bond are not executed within ten (10) days from the date of the NOTICE OF AWARD.

<u>LIQUIDATED DAMAGES</u> will be assessed at the rate of \$500.00 per day for each day beyond the contract length herein stipulated.

The undersigned bidder further agrees to pay the premiums for the Surety Bond (Performance, Labor and Materials Payment Bonds) for which said premiums are to be included in the Bid Price.

BIDDING FIRM:	
NUMBER & STREET:	
CITY/STATE/ZIP:	
SIGNATURE:	
TITLE:	
DATE:	
TELEPHONE NO.:	

Being a Corporation, incorporated under the laws of the State of

(Partnership) (Individual)

Composed of officers, partners or owner as follows:

(President, Owner, Partner)

(Corporate Seal)

BID FORM

Addendum No. 2 - May 17, 2024

EAST F	BID FORM ST PROVIDENCE CLEANING AND LINING PROJECT PHASE V (CL-V) Addendum No. 2 - May 17, 2							
Bid Item	Description	Quantity	Unit Bid Price	Unit	Total Cost	Total Price in Words		
	NOTE: THE UNIT PRICE FOR EACH ITEM MUST BE WRITTEN IN WORDS AND FIGURES. IN CASE OF DISCREPANCY, THE AMOUNT SHOWN IN WORDS WILL GOVERN.							
1	Mobilization/Demobilization	1		%				
2	Test Pits	50		EACH				
3	Rock Removal	50		CY				
4	Crushed Processed Gravel	500		CY				
5	Permanent Timber Sheeting	300		SF				
6	Remove Obstruction	5		EACH				
7	Clean Existing 6" Cast Iron Main	24,000		LF				
8	Clean Existing 8" Cast Iron Main	30,000		LF				
9	Clean Existing 12" Cast Iron Main	4,500		LF				
10	Clean Existing 16" Cast Iron Main	200		LF				
11	Cement Mortar Lining Existing 6" Cast Iron Main	24,000		LF				
12	Cement Mortar Lining Existing 8" Cast Iron Main	30,000		LF				
13	Cement Mortar Lining Existing 12" Cast Iron Main	4,500		LF				
14	Cement Mortar Lining Existing 16" Cast Iron Main	200		LF				
15	CCTV Inspect 6" Cast Iron Main	24,000		LF				
16	CCTV Inspect 8" Cast Iron Main	30,000		LF				
17	CCTV Inspect 12" Cast Iron Main	4,500		LF				
18	CCTV Inspect 16" Cast Iron Main	200		LF				

BID FORM

EAST P	BID FORM AST PROVIDENCE CLEANING AND LINING PROJECT PHASE V (CL-V) Addendum No. 2 - May 17, 2024 Addendum No. 2 - May 17, 2024						
Bid Item	Description	Quantity	Unit Bid Price	Unit	Total Cost	Total Price in Words	
	NOTE: THE UNIT PRICE FOR EACH ITEM MUST BE WRITTEN IN WORDS AND FIGURES. IN CASE OF DISCREPANCY, THE AMOUNT SHOWN IN WORDS WILL GOVERN.						
19	Furnish & Install 4" Ductile Iron Pipe	100		LF			
20	Furnish & Install 6" Ductile Iron Pipe	7,000		LF			
21	Furnish & Install 8" Ductile Iron Pipe	12,000		LF			
22	Furnish & Install 10" Ductile Iron Pipe	400		LF			
23	Furnish & Install 12" Ductile Iron Pipe	1,500		LF			
24	Furnish & Install 16" Ductile Iron Pipe	500		LF			
25	Furnish & Install Ductile Iron Fittings with Thrust Restraint	125,000		LBS			
26	Furnish & Install 6" Tapping Sleeve and Valve	1		EACH			
27	Furnish & Install 8" Tapping Sleeve and Valve	1		EACH			
28	Furnish & Install 12" Tapping Sleeve and Valve	1		EACH			
29	Furnish & Install 2" Ball Valve and Valve Box	2		EACH			
30	Furnish & Install 4" Gate Valve and Valve Box	2		EACH			
31	Furnish & Install 6" Gate Valve and Valve Box	275		EACH			
32	Furnish & Install 8" Gate Valve and Valve Box	250		EACH			
33	Furnish & Install 10" Gate Valve and Valve Box	2		EACH			
34	Furnish & Install 12" Gate Valve and Valve Box	75		EACH			
35	Furnish & Install 16" Butterfly Valves	6		EACH			
36	Furnish & Install Fire Hydrant Assembly	80		EACH			

BID FORM

Addendum No. 2 - May 17, 2024

EAST F	BID FORM ST PROVIDENCE CLEANING AND LINING PROJECT PHASE V (CL-V) Addendum No. 2 - May 17, 2						
Bid Item	Description	Quantity	Unit Bid Price	Unit	Total Cost	Total Price in Words	
	NOTE: THE UNIT PRICE FOR EACH ITEM MUST BE WRITTEN IN WORDS AND FIGURES. IN CASE OF DISCREPANCY, THE AMOUNT SHOWN IN WORDS WILL GOVERN.						
37	Reset Existing Fire Hydrant	40	E	EACH			
38	Replace Lead Service Lines	15	E	EACH			
39	Furnish & Install 3/4" Copper Service	3,000		LF			
40	Furnish & Install 3/4" Corporation Stop	100	E	EACH			
41	Furnish & Install 3/4" Curb Stop and Box	500	E	EACH			
42	Furnish & Install 1" Copper Service	1,200		LF			
43	Furnish & Install 1" Corporation Stop	50	E	EACH			
44	Furnish & Install 1" Curb Stop and Box	60	E	EACH			
45	Furnish & Install 2" Copper Service	650		LF			
46	Furnish & Install 2" Corporation Stop	12	E	EACH			
47	Furnish & Install 2" Curb Stop and Box	12	E	EACH			
48	Furnish & Install 2" Blow-Off Assembly and Road Box	5	E	EACH			
49	Furnish & Install 2" Bypass Pipe	80,000		LF			
50	Furnish & Install 4" Bypass Pipe	45,000		LF			
51	Furnish & Install 6" Bypass Pipe	500		LF			
52	Furnish & Install 2" Bypass Feed	5	E	EACH			
53	Temporary Fire Service Connection (2" - 4")	5	E	EACH			
54	Temporary Fire Service Connection (6")	25	E	EACH			

BID FORM

EAST P	ROVIDENCE CLEANING AND LINING PR	OJECT PH	ASE V (CL-V)	FORM	Addendum No. 2 - May 17, 2024_	
Bid Item	Description	Quantity	Unit Bid Price	Unit	Total Cost	Total Price in Words
	NOTE: THE UNIT F	PRICE FOR EACI	H ITEM MUST BE WRITTEN IN WO	URES. IN CASE OF DISCREPANCY, THE AM	OUNT SHOWN IN WORDS WILL GOVERN.	
55	Temporary Fire Service Connection (8" service)	2		EACH		
56	Temporary Pavement, Hot Mix - 2" Thick	17,500		SY		
57	Permanent Pavement / Bituminous Asphalt (>3" to = 6" Thick)</td <td>5,000</td> <td></td> <td>TON</td> <td></td> <td></td>	5,000		TON		
58	Remove and Replace Existing Concrete Sidewalk	200		CY		
59	Concrete Road Base - State Roads	2,000		SY		
60	1-1/2" Mill and Overlay	100,000		SY		
61	Temporary and Permanent Repair of Traffic Control Loops	20		EACH		
62	Mechanical Full Size Street Sweeping	200		HRS		
63	Remove and Dispose Abandoned Road Box	10		EACH		
64	Adjust Castings to Grade	10		EACH		
65	Infrared Pavement Repair	200		SY		
66	Traffic Control - East Providence Police Detail	1	\$ 350,000.00	ALLOW	\$ 350,000.00	Three Hundred Thousand Dollars and Zero Cents
67	Loam and Seed Restoration	500		SY		
68	Support of Existing Utilities Allowance	1	\$ 25,000.00	ALLOW	\$ 25,000.00	Twenty Five Thousand Dollars and Zero Cents
			Total Bid Price in	Figures:		
			Total Bid Price in	n Words:		

SECTION 02750

TEMPORARY BYPASS PIPING AND SERVICES

PART 1 GENERAL

1.1 DESCRIPTION

- A. Scope of Work: The Contractor shall stage his work to minimize disruption of water service to abutters. However, the Contractor will not be permitted to temporarily interconnect the system until all required procedures for chlorination, disinfection and testing of the new water mains, as specified in Section 02710 "TESTING AND DISINFECTING WATER MAINS" have been performed, and the procedure approved in writing by the Owner. A testable backflow prevention device between the potable water system and the temporary by-pass water system as well as a water meter is required to charge the by-pass system. Any and all temporary materials and work required to provide for the interconnection and disconnection of the system will <u>not</u> be considered temporary bypass piping but shall be considered to be included in the process bid for the applicable items for work under this contract.
- B. Prior to any connection to the existing water system, a testable back flow prevention device shall be installed between the potable water system and the hose used to convey water for construction.
- C. Prior to installation, the Contractor shall prepare a plan (2 copies) showing all proposed bypass piping locations and shall submit this plan to the Owner for review. Upon receipt of written approval by the Owner, the Contractor will proceed to install and be compensated for the temporary bypass piping and services, as outlined in Section 02750 "TEPMORARY BYPASS PIPING AND SERVICES". Should it be determined at any time during the construction, that the proposed bypass system piping cannot be installed as shown on the temporary bypass piping plan or in alternate locations approved by the Owner, without extensive disruption of service of the existing water system, the Contractor will immediately notify the Owner. The Owner shall have the final approval on the layout and pipe sizes of the proposed bypass piping system.
- D. The work covered under this section of the Specifications includes the furnishing of all labor, equipment, tools, appurtenances and, materials, and performing all operations in connection with providing, maintaining, repairing, and removing all temporary bypass piping and service connections, as specified. Use of temporary bypass piping includes testable back flow prevention devices, water meters, temporary building service piping and connections, valves, fittings, piping, hydrants, connections to other piping and facilities, disinfection of temporary bypass line and service piping, excavations and backfills, restoration or replacement of all disturbed existing work, crossings over traveled ways, and all other incidental and appurtenant work required to satisfactorily provide temporary water service to consumers, including domestic and fire protection uses, complete, in strict accordance with the Specifications and Drawings, and as directed. When fire hydrants are by-passed, a 4-inch bypass line shall be used and a 4 ½ -inch outlet complete with valve and attachment capable of accommodating a 5-inch Storz connection may be required, or as directed by the Fire Department shall serve as a

temporary hydrant. The temporary hydrant shall be on the same side of the street and within 25 feet of the existing fire hydrant wherever possible. Temporary hydrants may be located on the opposite side of the street where they would otherwise conflict with work pits or other construction activities, if depicted on Contractor's temporary bypass plans issued for review and approval.

- E. All temporary bypass piping and building service connections shall be provided in such a manner that all public health and safety requirements of the State and Owner shall be strictly adhered to at all times. It shall be the responsibility of the Contractor to familiarize himself with all State and City of East Providence public health and safety requirements as they may affect the work under this contract. All temporary bypass service piping and building services shall be provided, kept in repair, and maintained in such a manner so as to prevent injury to persons, or damage to the work or public and private property.
- E.F. The contractor shall provide a list of three contacts that are available 24 hours a day for emergency bypass repair. The contractor shall respond within one hour to repair the damaged or leaking by-pass piping and the Owner/Engineer shall be notified whenever these events occur.

1.2 RELATED WORK DESCRIBED ELSEWHERE

1.	Earth Trench Excavation and Backfill	Section 02211
2.	Restoration of Lawns and Right-of-Way Areas	Section 02486
3.	Pavement Restoration	Section 02513
4.	Ductile Iron Water Mains and Appurtenances	Section 02615
5.	Testing and Disinfecting Water Mains	Section 02710
6.	Installation of Water Pipeline Systems	Section 02713

PART 2 PRODUCTS

2.1 MATERIALS – PIPING, VALVES, AND HYDRANTS

- A. All piping and or hose must be designated for potable/residential water use and be certified for use in contact with potable water. Service connections shall be made with piping that has NSF Standard 61 certification.
- B. All pipe and appurtenances used in providing the temporary bypass service piping shall be in good condition and adequate to withstand at least 1-1/2 times the normal water working pressures and all other conditions of use or a minimum of 160 psi for 2 inch to 4 inch or 130 psi for 6 inch. The pipe and other materials shall provide adequate watertightness. Temporary hydrants shall meet the approval of the City of East

Providence prior to installation. In general, any bypass piping including a temporary hydrant shall be 4-inch minimum.

C. Piping shall be High Density Polyethylene (HDPE) SDR – 11, NSF 61 certified. The pipe shall be DriscoPlex PE 3408 or approved equal HDPE, butt-fusion welded, each joint being restrained. Service hose/tubing shall be NSF 61 certified and shall be a high purity street to home potable water hose with a PVC tube and blue PVC compound cover.

PART 3 EXECUTION

3.1 TEMPORARY BYPASS PIPING AND SERVICES

- The Contractor shall provide temporary valved bypass piping and services as required A. and approved to satisfactorily provide adequate fire protection and serve all water customers serviced by the section of water main that is out of service during the performance of the work under this contract. In general, bypass pipe shall be 4-inch diameter for temporary fire hydrant and commercial service supplies. Residential service supply piping shall be 2-inch. In the instance of higher demand or locations where multiple feeds are not available 6-inch bypass pipe may be required. Road crossings with 1" hose will not be permitted. Dead-end bypass lines shall be provided with valves and piping for blowoffs and bleeding. The Contractor shall provide temporary building service connections to every building served by the section of water main taken out of service. Temporary building service connections shall extend from the 4-inch-bypass pipe and shall be of adequate size to satisfactorily provide adequate water for the building being serviced. Temporary service connections for fire services will be paid for using the appropriate unit prices included in the bid. Otherwise, there will be no separate payment made for building service connections, but the cost thereof shall be deemed to be included in the unit price bid for furnishing and installing temporary bypass pipe and services. services. No separate payment will be made for building service connections, but the cost thereof shall be deemed to be included in the unit price bid for furnishing and installing 4-inch temporary bypass pipe and services.
- B. In general, all temporary piping and service shall be provided in such a manner as to protect it from damage and to ensure uninterrupted supply and shall be located out of traveled ways where practicable, in locations where it will cause the least obstruction and inconvenience, and where it will be least subject to damage. The piping shall be adequately anchored to assure no movement due to expansion or contraction.
- C. The bypass pipe shall be supplied from connections made to hydrants or existing water mains that are to remain in service. Wherever possible, each bypass piping section shall have a minimum of two (2) feeds. The Contractor shall furnish all work and fittings including meters and make all necessary connections required to supply the bypass pipes (including services) with water from hydrants or existing water mains including testable back flow prevention devices. Procedures for connecting bypass pipes to existing watermains that are to remain in service are specified elsewhere in this Section.
- D. All temporary building service connections, with the exception of fire services greater

than 2-inch in size, shall extend from the bypass pipe and terminate at the connection to the building plumbing. For fire services, temporary connection can be made at the property line by cutting out the existing service pipe, connecting temporary polyethylene service to existing service with appropriate coupling, and reconnecting existing fire service with new ductile iron and couplings. The limits of new ductile iron fire service pipe shall be determined in the field and paid for using the appropriate bid items for "Furnishing and Installing New Ductile Iron Water Main". A list of fire services in the project area is included as Attachment A of this specification section.

- <u>E.</u> Temporary building services shall include all necessary hoses, pipes, valves, and fittings, of approved size, required to service consumers. The Contractor shall make the actual connection and disconnection to the consumer's building plumbing and shall coordinate his work with the Owner of any building to be serviced so that there will be the least amount of inconvenience to the owners. In general, the Contractor may connect temporary service hose or piping to the consumer's plumbing by any means acceptable to the East Providence Water Division and the property owner, including either inside or outside connections to temporarily disassembled water system components, or direct connections to hose bibs, standpipes or other acceptable to the City of East Providence Water Division and the owners. At the request of the property owner, outside connections to hose bibs shall include a "y" type hose connection fittings at no additional cost to the City of East Providence, Water Division.
- F. In the event that the Contractor deems it necessary to "drop" meters in customer's homes for connection to the bypass, he shall <u>make arrangements to have members ofprovide</u> <u>advance notice to</u> the Water Division meter department<u>personnel and provide them the</u> <u>opportunity to be</u> present when the meters are reinstalled or replaced. Arrangements are to be made with the Water Division meter department supervisor and require a minimum of 24 hours prior notice. All meters will be inspected and resealed by the Water Division at this time. No meters are to be reinstalled without the presence of a Water Division meter department official. The Contractor is responsible for all scheduling and notifications for the affected customers.
- G. Once put in use, all temporary piping and services shall be maintained by the Contractor until the new water main is placed in service. Any interruptions, whether caused by frost, physical damage, or otherwise, shall be immediately corrected by the Contractor, and the service restored or replaced without additional payment.

3.2 PIPING CROSSING TRAVELED WAYS

A. The Contractor shall layout temporary bypass piping in such a manner as to minimize the number of street crossings required. Where temporary bypass pipes and service lines are permitted to cross streets, driveways or sidewalks, the Contractor shall provide all necessary and required construction to protect and prevent injury to persons, property, vehicles and the pipelines. At street crossings, narrow trenches shall be excavated and the pipe shall be installed below the roadway surface with bituminous concrete placed around and above the pipe flush with the existing roadway surface. At driveways, provisions shall be made, as approved by the City, to permit vehicles to drive over the

temporary pipe by the use of ramps constructed of bituminous concrete, wood or other acceptable material on each side of the pipe; by depressing the pipe as at street crossings; or by such other methods that may be acceptable and suitable for the purpose intended.

- B. The Contractor shall provide watchmen, lights, barriers, signs and such other methods as may be necessary or required to maintain and direct traffic through the project and to prevent injury to persons and property and to comply will all State and City safety codes, ordinances and regulations. Separate payment will not be made for the furnishing of watchmen, lights, barriers, signs, etc. for protection of traffic and to prevent injury to persons and property, as specified under Section 01576 "PROTECTION OF TRAFFIC, PERSONS AND PROPERTY"; however, separate payment will be made for the furnishing of uniformed policemen for direction of traffic, as specified under Section 01570 "TRAFFIC REGULATION".
- C. All cutting of pavements shall be made using mechanical pavement cutters; trenches shall be straight and all cut edges shall be clean vertical faces. Temporary and permanent pavement require to restore pavement, sidewalks, and driveways damaged or displaced as a result of the work under this section, is specified under Section 02513 "PAVEMENT RESTORATION"; and payment will be made for such work, under the applicable items, as listed in the Bid.

3.3 DISINFECTION

A. All temporary bypass lines, services and connections shall be disinfected (according to

AWWA standards) just before being placed into service. Disinfection of service lines shall be done as part of the work included under this section of the specifications and in accordance with the requirements specified under Section 02710 "TESTING AND DISINFECTING WATER MAINS". No separate payment will be made for such work, but the cost thereof shall be deemed to be included in the work required herein.

3.4 DISCONNECTION AND REMOVAL OF TEMPORARY PIPING

A. After the new water main is accepted and placed in service, and permanent service to consumers has been restored, and when approved, the Contractor shall remove all temporary bypass piping and building service connections, and all other temporary work, as directed; place temporary paving as required; restore to their original conditions all walks, drives, curbs, grassed areas and such other parts which have been disturbed as a result of the Contractor's operations; and do all other work as necessary and directed to leave all work and property in a clean and acceptable condition, at no additional expense to the Owner. Where bypass is to be retained for service to adjacent sections or streets, the work shall be so scheduled to minimize overall "in-place" time.

3.5 **PROTECTION**

A. The Contractor shall be responsible for taking and providing all necessary and required precautionary measures at all times during the installation and removal of the temporary bypass service piping and building service connections, to prevent any contamination of

the water supply, City of East Providence mains and service piping, and for the protection of public health and safety.

3.6 TEMPORARY CONNECTIONS TO EXISTING WATER MAINS

- A. At some locations, as directed or approved by the Owner, it may be necessary to install tees or corporation stops in existing water mains in order to supply the temporary bypass piping with water service. The types of connections made shall be determined by the water service requirements and shall be as approved or directed by the Owner.
- B. At locations, as approved or directed by the Owner, where connections for temporary bypass piping are to be made underground to the existing water mains with corporation stops, the Contractor shall make the necessary excavations at the locations and to the limits as necessary to uncover the existing underground water lines and permit the installation of corporation stops thereto. The Contractor shall furnish and install a 2" corporation stop, a pipe nipple or gooseneck and a shutoff valve at the connection to the existing water line; connect the temporary bypass piping to the shutoff valve and, where directed by the Owner, backfill the excavation and install temporary bituminous pavement. When the need for the service piping has ceased, the Contractor shall reexcavate, where necessary, remove the corporation stop; install a threaded plug, disconnect and remove the service piping, shutoff valve, and pipe nipple or gooseneck; backfill the excavations; and provide the gravel base course and temporary and permanent pavements over the excavated and disturbed areas in accordance with the requirements specified and as directed. Payment for corporation stops and accessories, and all labor for connecting the temporary bypass pipe to the existing water main will be included in the unit price bid for "FURNISH AND INSTALL 2" BYPASS PIPE" as listed in the Bid.

3.7 TEMPORARY FIRE HYDRANTS

Where fire hydrants are by-passed, the Contractor shall furnish, install, maintain and A. remove temporary hydrants. The temporary hydrant shall be placed within 25 ft. and on the same side of the street of the hydrant to be out of service. A 4-inch bypass line shall be used and a 4 1/2 -inch outlet complete with valve and attachment capable of a accommodating a 5-inch Storz connection, or as directed by the Fire Department shall serve as a temporary hydrant. Temporary hydrants shall meet the approval of the City and the Fire Department, and shall be set in such a manner that the Fire Department will have no difficulty making a connection with a fire hose, and where they will cause the least obstruction to vehicular and pedestrian traffic, and will be least likely to be damaged. Nozzles shall be threaded for cap and grooved for fire hose attachment, using National Standard Thread. Before permanently shutting off the water main that is to be replaced, the Contractor shall test all temporary hydrants and valves to be sure that they are in proper working order. Once put into use, the temporary hydrants shall be maintained until existing hydrants and/or new hydrants are restored to service. Any existing hydrants that are out of service shall be "bagged" by the contractor and reported to the fire department as being out of service. No separate payment will be made for temporary hydrants, but the cost thereof shall be deemed to be included in the unit price bid for furnishing and installing temporary bypass piping and services.

3.8 EARTHWORK

A. All earthwork including excavation, refill, backfill and appurtenant work required in connection with providing, installing, maintaining, repairing and removing temporary bypass service piping shall be performed in accordance with Section 02211 "EARTH TRENCH EXCAVATION AND BACKFILL" of these Specifications, and to additional requirements the cost thereof shall be deemed to be included in the work required under this section of the specifications

PART 4 MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

- "FURNISH AND INSTALL BYPASS PIPE" shall be measured for payment at the unit linear foot (L.F.), as the actual laid length of bypass piping of various size. With the exception of fire services, noNo separate payment will be made for piping for building services of any size. Any temporary bypass piping smaller than 2-inches in diameter will not be paid for. The unit price bid shall include full compensation for furnishing, installing, maintaining and removing, all temporary bypass piping and building service connections in complete conformance with these Specifications and accepted by the Owner.
- 2. "TEMPORARY FIRE SERVICE CONNECTION" shall be measured for payment at the unit price for each fire service connected to temporary bypass piping. The unit price bid shall include full compensation for furnishing, installing, maintaining, and removing all temporary fire service connections in complete conformance with these Specifications and accepted by the Owner.
- 3. Corporation Stops and connections to existing mains, where necessary, will <u>not</u> be measured separately for payment.
- 4. Temporary and permanent pavement required in connection with the repair of bypass piping trenches will be measured for payment in square yards (S.Y.) under the appropriate items. Measurement will be the actual length of trench and a maximum payment width of one (1) foot.

4.2 BASIS OF PAYMENT

1. "TEMPORARY BYPASS PIPING AND SERVICES" will be paid for as specified above, at the unit prices bid, which shall constitute full compensation for the furnishing of all labor, equipment, tools, supplies, appurtenances, materials and all work incidental and necessary for satisfactorily installing, maintaining, repairing and removing all temporary service piping, temporary hydrants, building service connections and connections to other piping and facilities; performing all earthwork including excavations, backfilling and borrow; compacting; restoring or replacing of all disturbed existing work; restoring disturbed curbing, sidewalks, drives, lawns and such other parts;

providing all protective and safety measures; and performing all incidental work necessary to complete the items in accordance with the Drawings and Specifications, and as directed.

- 2. Temporary and permanent pavement required in connection with the providing of temporary by-pass piping and services will be paid for under the applicable items, as listed in the Bid.
- 3. Separate payment will be made for furnishing and installing 2" Corporation Stops and accessories for connection of temporary bypass piping to existing DEAD END water mains or feed points on existing water mains for purposes of providing adequate water supply. The cost thereof, including al labor and necessary accessories shall be included in the unit price bid for FURNISHING AND INSTALLING 2" BYPASS FEED as listed in the Bid. Each tap location shall be regarded as <u>one</u> regardless of how many taps are needed to adequately supply water to or from the bypass. This item shall <u>not</u> include feeds for temporary bypass piping for building fire or domestic service connections.
- 4. Separate payment will <u>not</u> be made for temporary service/fire connections to buildings, extending from the temporary bypass pipe and terminating at the connection to the building plumbing or connection to building underground service piping, or for temporary building service connections which run from building to building; all costs in connection with furnishing, installing, maintaining and removing temporary building service connections will be included in the unit price bid for FURNISH AND INSTALL BYPASS PIPE as listed in the Bid.
- 5. Separate payment will <u>not</u> be made for pipe, fittings, valves or such other accessories and appurtenances incorporated in the temporary bypass piping and services, unless otherwise directed, and all costs thereof shall be included under the unit price bid for FURNISH AND INSTALL BYPASS PIPE as listed in the Bid.

END OF SECTION

Section 02750 – Temporary Bypass Piping and Services
Attachment A - Fire Services

Fire Service Location	Fire Service Size
999 South Broadway	6"
305 Lyon Avenue	4"
1050 Willette Avenue	8"
66 Crescent View Avenue	6"
444 Willette Avenue	6"
336 Willette Avenue	6"
386 Willette Avenue	6"
803 Willette Avenue	6"
127 Valley Street	2"
1075 South Broadway	2"
1080 – 1086 Willette Avenue	6"
39 Warren Avenue	6"
1098 Pawtucket Avenue	6"
286 – 288 Warren Avenue	6"
179 Newport Avenue	6"
30 Veteran's Memorial Parkway	6"
62 – 78 Valley Street	4"
89 Valley Street	6"
29 Burgess Avenue	4"
75 Newport Avenue	6"
28 – 34 Water Street	6"
80 Newport Avenue	?
210 – 230 Newport Avenue	6"
45 Newport Avenue	6"
63 Newport Avenue	6"
100 Newman Avenue	6"
150 – 156 Warren Avenue	6"
156 Valley Street	6"
65 Newport Avenue	6"
1240 Pawtucket Avenue	6"
376 Newport Avenue	6"
1275 South Broadway	8"