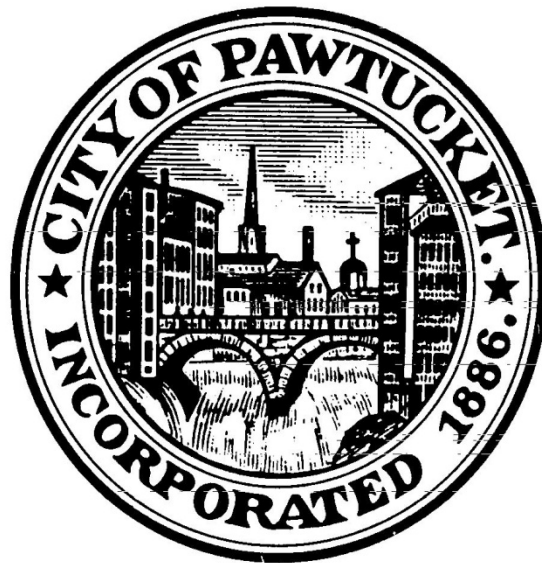


CITY OF PAWTUCKET
and
PAWTUCKET WATER SUPPLY BOARD
REQUEST FOR SEALED BIDS



Spring 2024

BID No. 24-041
Water Distribution System Improvements
Main Replacement – Contract MR-14

Contents:

- 1.0 Bid/Solicitation Information
- 2.0 Instructions and Notifications to Bidders
- 3.0 Overview
- 4.0 Scope of Work
- 5.0 Insurance
- 6.0 Acknowledgement of Risk and Hold Harmless Agreement
- 7.0 Additional Insurance Requirements
- 8.0 Proposal Content and Organization
- 9.0 Evaluation Criteria
- 10.0 Miscellaneous
- 11.0 Bid Form
- Appendix A Anti-Kickback Acknowledgement
- Appendix B City of Pawtucket Purchasing Rules and Regulations and Terms and Conditions of Purchase
- Appendix C Specifications for Contract MR -14 (including Proposal Form)

1.0 - Bid/Solicitation Information

Schedule

Pre-Bid/Proposal Conference: No Yes

Date: **April 30, 2024 at 10:00 AM (non – mandatory)**

Location:

Pawtucket Water Supply Board
85 Branch St.
Pawtucket, RI 02860
Room: 1st Floor Training Room

Requests for Further Information Prior to: **May 3, 2024, at 2:00 PM**

Requests for information or clarification must be made electronically to the attention of:
Stephen Soito, – Engineering Manager
E-mail: ssoito@pwsb.org

Please reference the Sealed Bid number on all correspondence. Answers to questions received, if any, will be posted on the internet as an addendum to this bid solicitation.

Sealed Bid Submission Deadline: **May 9, 2024 at 12:00 PM**

Late submittals will not be considered.

Publicly Opened on: **May 9, 2024 at 4:00 PM at a Purchasing Board Meeting**

Sealed Bids must be mailed or hand-delivered in a sealed envelope **marked with the Sealed Bid # and Project Name** to:

Pawtucket City Hall - Purchasing Office
137 Roosevelt Avenue
Pawtucket, RI 02860

Bonds/Surety Required

Surety Bond: No Yes

Bidder is required to provide a bid surety in the form of a bid bond or certified check payable to the City of Pawtucket in an amount not less than ten percent (10%) of the bid price.

Fidelity Bond: No Yes

Performance Bond and Labor and Material Bond: No Yes

The successful bidder will be required to furnish all insurance documentation as outlined in the specifications document.

Miscellaneous

The bid process and resulting contract are subject to the Rules and Regulations and General Terms and Conditions of Purchase. Submission of a bid in response to this solicitation is acknowledgement and acceptance of these Rules and Regulations and General Terms and Conditions of Purchase.

The City of Pawtucket reserves the right to award on the basis of cost alone, accept or reject any or all bids, and to act in its best interest including, but not limited to, directly negotiating with any vendor who submits a proposal in response to this Sealed Bid and to award a contract based upon the results of those negotiations alone. Proposals found to be technically or substantially non-responsive at any point in the evaluation process will be rejected and not considered further. The City of Pawtucket may, at its sole option, elect to require presentations(s) by bidders clearly in consideration for award.

2.0 - Instructions and Notifications to Bidders

- Bidding Documents may be examined at the office of the Owner, Pawtucket Water Supply Board, 85 Branch Street, Pawtucket, RI 02860 between the hours of 9:00 AM to Noon and 1:00 PM to 4:00 PM, Monday through Friday. Bidding Documents and any issued addenda will be available at City of Pawtucket website <http://www.pawtucketri.com/purchasing>. The bidder shall be responsible for all costs associated with printing hard copies of the contract bidding documents.
- No interpretations as to meaning of the Plans, Specifications, or other Contract Documents will be made to any bidder orally. All questions or requests for interpretations concerning this Request for Bids shall be in writing (or emailed) to the office of the Owner, Pawtucket Water Supply Board, 85 Branch Street, Pawtucket, RI 02860 at (ssoito@pwsb.org) no later than May 3, 2024 at 2:00 PM. Please reference the Contract Bid No. 24-041 on all correspondence. Any contract addendum, if issued, will be posted on the internet at: <http://www.pawtucketri.com/purchasing>. Failure of bidder to receive any such addendum or interpretations shall not relieve any bidder from obligation under this bid as submitted. All addenda so issued shall become part of the Contract Documents.
- The words “City of Pawtucket” when used, shall also mean the Pawtucket Water Supply Board acting through its Chairman.
- It is the vendor's responsibility to examine all specifications and conditions thoroughly, and comply fully with specifications and all attached terms and conditions. Vendors must comply with all Federal, State, and City laws, ordinances and regulations, and meet any and all registration requirements where required for contractors as set forth by the State of Rhode Island. Failure to make a complete submission as described herein may result in a rejection of the proposal.
- All costs associated with developing or submitting a proposal in response to this Request, or to provide oral or written clarification of its content shall be borne by the bidder. The City of Pawtucket assumes no responsibility for these costs.
- A submittal may be withdrawn by written request to the Purchasing Agent by the proposer prior to the stated Sealed Bid deadline.
- Prior to the proposal deadline established for this Sealed Bid, changes may be made to a proposal already received by the City if that vendor makes a request to the Purchasing Agent, in writing, to do so. No changes to a proposal shall be made after the Sealed Bid deadline.

- Proposals are considered to be irrevocable for a period of not less than ninety (90) days following the opening date, and may not be withdrawn, except with the express written permission of the Purchasing Agent. Should any vendor object to this condition, the vendor must provide objection through a question and/or complaint to the Purchasing Agent prior to the proposal deadline.
- All pricing submitted will be considered to be firm and fixed unless otherwise indicated herein.

The vendor has full responsibility to ensure that the proposal arrives at the Purchasing Division Office prior to the deadline set out herein. The City assumes no responsibility for delays caused by the U.S. Postal Service or any other delivery service. Postmarking by the due date will not substitute for actual receipt of response by the due date. Proposals arriving after the deadline may be returned, unopened, to the vendor, or may simply be declared non-responsive and not subject to evaluation, at the sole discretion of the Purchasing Agent. **For the purposes of this requirement, the official time and date shall be that of the time clock in the City of Pawtucket’s Purchasing Office.**

- It is intended that an award pursuant to this Sealed Bid will be made to a prime contractor, who will assume responsibility for all aspects of the work. Joint venture and cooperative proposals will not be considered, but subcontracts are permitted, provided that their use is clearly indicated in the bidder's proposal, and the subcontractor(s) proposed to be used are identified in the proposal.
- Bidders are advised that all materials submitted to the City of Pawtucket for consideration in response to this Sealed Bid shall be considered to be public records as defined in Title 38 Chapter 2 of the Rhode Island General Laws, without exception, and may be released for inspection immediately upon request once an award has been made.
- Vendors are responsible for errors and omissions in their proposals. No such error or omission shall diminish the vendor's obligations to the City.
- The City reserves the right to reject any or all proposals, or portions thereof, at any time, with no penalty. The City also has the right to waive immaterial defects and minor irregularities in any submitted proposal at its sole discretion. All material submitted in response to this Sealed Bid shall become the property of the City of Pawtucket upon delivery to the Purchasing Agent.

3.0 - Overview

The City of Pawtucket desires to seek sealed bids for contract MR-14 for the Pawtucket Water Supply Board. This contract consists of the replacement of approximately 29,500 feet of 6”, 8”, and 12” water main in the City of Pawtucket, Rhode Island.

4.0 - Scope of Work

Contract MR-14 with all related incidental and appurtenant work as shown on the “Design Plans” document and as described and outlined in the “Specifications” document. Bid documents are available on the City of Pawtucket website at <http://www.pawtucketri.com/purchasing> on and after April 19, 2024

5.0 - Insurance

Refer to “Specifications” document, Section 00721, titled “General Conditions”, Article 30, titled “Insurances”.

6.0 - Acknowledgement of Risk & Hold Harmless Agreement

In addition to the indemnity provisions in the City of Pawtucket’s Terms and Conditions of Purchase and to the fullest extent permitted by law, the selected vendor, its officers, agents, servants, employees, parents, subsidiaries, partners, officers, directors, attorneys, insurers, and/or affiliates (Releasors) agree to release, waive, discharge and covenant not to sue the City of Pawtucket, its officers, agents, servants or employees (Releasees) from any and all liability, claims, cross-claims, rights in law or in equity, agreements, promises demands, actions and causes of action whatsoever arising out of or related to any loss, damage, expenses (including without limitation, all legal fees, expenses, interest and penalties) or injury (including death), of any type, kind or nature whatsoever, whether based in contract, tort, warranty, or other legal, statutory, or equitable theory of recovery, which relate to or arise out of the Releasors use of or presence in and/or on City of Pawtucket property. The Releasors agree to defend, indemnify and hold harmless the Releasees from (a) any and all claims, loss, liability, damages or costs by any person, firm, corporation or other entity claiming by, through or under Releasors in any capacity whatsoever, including all subrogation claims and/or claims for reimbursement, including any court costs and attorneys fees, that may incur due to Releasors use of or presence in and on City of Pawtucket property; and (b) any and all legal actions, including third-party actions, cross-actions, and/or claims for contribution and/or indemnity with respect to any claims by any other persons, entities, parties, which relate to or arise out of Releasors use of or presence in and on City of Pawtucket property.

The Releasors acknowledge the risks that may be involved and hazards connected with use of or presence in and on City of Pawtucket property but elect to provide services under any contract with the City of Pawtucket with full knowledge of such risks. Releasors also acknowledge that any loss, damage, and/or injury sustained by Releasors is not covered by Releasees insurance. Releasors agree to become fully aware of any safety risks involved with the performance of services under any contract with the City of Pawtucket and any safety precautions that need to be followed and agree to take all such precautions.

The duty to indemnify and/or hold harmless the City of Pawtucket shall not be limited by the insurance required under the City of Pawtucket Terms and Conditions of Purchase.

7.0 - Additional Insurance Requirements

In addition to the insurance provisions in the City of Pawtucket Terms and Conditions of Purchase, the liability insurance coverage, except Professional Liability, Errors and Omissions or Workers’ Compensation insurance required for performance of a contract with the City of Pawtucket shall include the City of Pawtucket, its divisions, officers and employees as Additional Insureds but only with respect to the selected vendor’s activities under the contract. The insurance required through a policy or endorsement shall include:

- A. a Waiver of Subrogation waiving any right to recovery the insurance company may have against the City of Pawtucket; and

- B. a provision that the selected vendor's insurance coverage shall be primary with respect to any insurance, self insurance or self retention maintained by the City of Pawtucket and that any insurance, self insurance or self retention maintained by the City of Pawtucket shall be in excess of the selected vendor's insurance and shall not contribute.

There shall be no cancellation, material change, potential exhaustion of aggregate limits or non-renewal without thirty (30) days written notice from the selected vendor or its insurer(s) to the City of Pawtucket's Purchasing Agent. Any failure to comply with the reporting provision of this clause shall be grounds for immediate termination of the contract with the City of Pawtucket.

Insurance coverage required under the contract shall be obtained from insurance companies acceptable to the City of Pawtucket. The selected vendor shall pay for all deductibles, self insured retentions and/or self insurance included hereunder.

The City of Pawtucket's Purchasing Agent reserves the right to consider and accept alternative forms and plans of insurance or to require additional or more extensive coverage for any individual requirement.

8.0 - Proposal Content and Organization

Pricing must include all costs as specified in this solicitation. Pricing for this proposal must be indicated on the Bid Form in Section 11.0 and must be submitted in a separate, sealed envelope marked with the words "Pricing Proposal".

All Bid Forms must be signed.

Vendors must include on the Bid Form a list of at least four (4) references with whom they have contracted to do similar work by including the company name, telephone number, contact person, and number of years they have served this customer. Preferably, references should be municipalities which are of approximate size as the City of Pawtucket, and a website address should be included if available.

Respondents must also include an overview of their company's experience including, but not limited to, the number of years the company has been providing these services, the size of the company (including the number of employees and locations), a description of work undertaken that is similar to what is being requested in this Sealed Bid, and, if applicable, certifications that show a knowledge of equipment that would be serviced or provided under this contract.

If any subcontractors are to be used in the performance of any work contracted for under this Sealed Bid, please list their name(s), contractor license #, address and phone number, and specific description of the subcontract work to be performed.

Only one (1) original copy of your proposal must be submitted at the time of submission. Proposals must be comprised of the following:

- 10% Bid Bond
- Bid Form
- Anti-Kickback Acknowledgment

Please state any and all additions, deletions, and exceptions, if any, that you are taking to any portion of this proposal. If not addressed specifically, the City of Pawtucket assumes that the vendor will adhere to all terms and conditions listed in this Sealed Bid.

Submission of a proposal is acknowledgement and acceptance of the City of Pawtucket's Purchasing Rules and Regulations and General Terms and Conditions of Purchase.

9.0 - Evaluation Criteria

The evaluation of proposals will be conducted in a time frame convenient to the City.

The City of Pawtucket reserves the right to award on the basis of cost alone, accept or reject any or all proposals, and to otherwise act in its best interest including, but not limited to, directly negotiating with any Supplier who submits a proposal in response to this Sealed Bid and to award a contract based upon the results of those negotiations alone. Further, the City reserves the right to waive irregularities it may deem minor in its consideration of proposals.

Proposals found to be technically or substantially non-responsive at any point in the evaluation process will be rejected and not considered further. The City of Pawtucket may elect to require presentations(s) by vendors in consideration for award.

Proposals will be evaluated in two (2) phases:

1. The first phase is an initial review to determine if the proposal, as submitted, is complete. To be complete, a proposal must meet all the requirements of this Sealed Bid.
2. The second phase is an in-depth analysis and review based on award to the lowest qualified bidder.

In the event that the City requires further information and/or a demonstration of any equipment or process offered in any proposal, all vendors asked for same will do so at no cost to the City.

10.0 - Miscellaneous

Vendors shall at all times comply with all federal, state, and local laws, ordinances and regulations and shall defend, indemnify and save harmless the City of Pawtucket against any claims arising from the violation of any such laws, ordinances and regulations, including but not limited to challenges as to the legality of any and all vendor installations.

The City is exempt from the payment of the Rhode Island State Sales Tax under the 1956 General Laws of the State of Rhode Island, 44-18-30, Paragraph 1, as amended. Further, the City is also exempt from the payment of any excise or federal transportation taxes. The proposal prices submitted must be exclusive of same, and will be so construed.

The City of Pawtucket reserves the right to cancel an agreement with the Vendor with thirty (30) days written notice and to award the contract to the next highest evaluated bidder.

The City of Pawtucket reserves the right to renegotiate the terms of this contract with the Vendor for subsequent years provided the Vendor agrees to the contract terms for the renewal period.

The payment and performance of any obligations under this contract for years beyond the first fiscal year are subject to the availability of funds.

The words "City of Pawtucket" when used, shall also mean the Pawtucket Water Supply Board acting through its Chairman.

All work under this Contract is subject to the prevailing wage rates of the State of Rhode Island. Certified payrolls will be required to be submitted for all work under this contract.

The Pawtucket Water Supply Board will be financing all main replacement and pipe rehabilitation projects. The successful bidder will be required to abide by the American Iron and Steel Requirements which are required in Public Law 113-235, the Consolidated and Further Continuation Appropriation Act 2015.

Time of Completion and Liquidated Damages: The bidder must agree to complete all work under this contract within **730 consecutive calendar days (which includes the winter shutdown period)** of the Pawtucket Water Supply Board's written "Notice to Proceed". There is a **\$1,000.00 per day penalty** for each consecutive calendar day after the 730 day time of completion limit until actual completion.

11.0 – Bid Form

Bidder to submit completed "Bid Proposal" document, which can be found in ***Appendix C (Specifications)***.

ANTI-KICKBACK ACKNOWLEDGMENT

ALL BIDDERS/OFFERORS MUST ATTEST TO THE FOLLOWING:

The vendor acknowledges, under the pains and penalties of perjury, that he/she has not been offered, paid, or solicited for any contribution or compensation, nor has he/she been granted a gift, gratuity, or other consideration, either directly or indirectly by any officer, employee or member of the governing body of the City of Pawtucket who exercises any functions or responsibilities in connection with either the award or execution of the project to which this contract pertains.

Further, the vendor acknowledges, under the pains and penalties of perjury, that he/she has not offered, paid, or solicited by way of any contribution or compensation, nor has he/she granted a gift, gratuity or other consideration either directly or indirectly to any officer, employee, or member of the governing body of the City of Pawtucket who exercises any functions or responsibilities in connection with either the award or execution of the project to which this project or contract pertains.

SIGNATURE OF OFFEROR

DATE

TITLE

COMPANY

Title of RFP or Bid:

BID NO. 24-041 - Water Distribution Improvements Main Replacement – Contract MR-14

Appendix B

CITY OF PAWTUCKET GENERAL TERMS AND CONDITIONS OF PURCHASE

Preamble

The City of Pawtucket's Purchasing Office may, from time to time, make amendments to the General Terms and Conditions when the City of Pawtucket's Purchasing Agent determines that such amendments are in the best interest of the City of Pawtucket. Amendments shall be made available for public inspection at the Purchasing Office located in Pawtucket City Hall but shall not require formal public notice and hearing. Copies of the Terms and Conditions shall be provided to any individual or firm requesting them. The words "City of Pawtucket" when used, shall also mean the Pawtucket Water Supply Board acting through its Chairman.

CITY OF PAWTUCKET'S PURCHASING OFFICE GENERAL CONDITIONS OF PURCHASE

All City of Pawtucket purchase orders, contracts, solicitations, delivery orders and service requests shall incorporate and be subject to the provisions of Rhode Island General Laws 8-15-4 and the City of Pawtucket purchasing rules and regulations adopted pursuant thereto, all other applicable provisions of the Rhode Island General Laws, the Pawtucket City Charter, specific requirements described in the Request or Contract, and the following General Conditions of Purchase:

1. **GENERAL**

All purchase orders, contracts, solicitations, delivery orders, and service requests are for specified goods and services, in accordance with express terms and conditions of purchase, as defined herein. For the purposes of this document, the terms "bidder" and "contractor" refer to any individual, firm, corporation, or other entity presenting a proposal indicating a desire to enter into contracts with the City of Pawtucket, or with whom a contract is executed by the City of Pawtucket's Purchasing Agent, and the term "contractor" shall have the same meaning as "vendor".

2. **ENTIRE AGREEMENT**

The City of Pawtucket's Purchase Order, or other City of Pawtucket contract endorsed by the City of Pawtucket Purchasing Office, shall constitute the entire and exclusive agreement between the City of Pawtucket and any contractor receiving an award. In the event any conflict between the bidder's standard terms of sale, these conditions or more specific provisions contained in the solicitation shall govern.

All communication between the City of Pawtucket and any contractor pertaining to any award or contract shall be accomplished in writing.

- a. Each proposal will be received with the understanding that the acceptance, in writing, by contract or Purchase Order by the City of Pawtucket Purchasing Agent of the offer to do work or to furnish any or all the materials, equipment, supplies or services described therein shall constitute a contract between the bidder and the City of Pawtucket. This shall bind the bidder on his part to furnish and deliver at the prices and in accordance with the conditions of said accepted proposal and detailed specifications and the City of Pawtucket on its part to order from such contractor (except in case of emergency) and to pay for at the agreed prices, all materials, equipment, supplies or services specified and delivered. A contract shall be deemed executory only to the extent of funds available for payment of the amounts shown on Purchase Orders issued by the City of Pawtucket to the contractors.
- b. No alterations or variations of the terms of the contract shall be valid or binding upon the City of Pawtucket unless submitted in writing and accepted by the City of Pawtucket Purchasing Agent. All orders and changes thereof must emanate from the City of Pawtucket Purchasing Office: no oral agreement or arrangement made by a contractor with a department or employee will be considered to be binding on the City of Pawtucket Purchasing Agent, and may be disregarded.
- c. Contracts will remain in force for the contract period specified or until all articles or services ordered before date of termination shall have been satisfactorily delivered or rendered and accepted and thereafter until all terms and conditions have been met, unless:

1. terminated prior to expiration date by satisfactory delivery against orders of entire quantities, or
 2. extended upon written authorization of the City of Pawtucket Purchasing Agent and accepted by the contractor, to permit ordering of the unordered balances or additional quantities at the contract price and in accordance with the contract terms, or
 3. canceled by the City of Pawtucket in accordance with other provisions stated herein.
- d. It is mutually understood and agreed that the contractor shall not assign, transfer, convey, sublet or otherwise dispose of this contract or his right, title or interest therein, or his power to execute such contract, to any other person, company or corporation, without the previous consent, in writing, of the City of Pawtucket Purchasing Agent.
 - e. If, subsequent to the submission of an offer or issuance of a purchase order or execution of a contract, the bidder or contractor shall merge with or be acquired by another entity, the contract may be terminated, except as a corporate resolution prepared by the contractor and the new entity ratifying acceptance of the original bid or contract terms, condition, and pricing is submitted to the City of Pawtucket Purchasing Office, and expressly accepted.
 - f. The contractor or bidder further warrants by submission of an offer or acceptance of a purchase order or other contract that he has no knowledge at the time of such action of any outstanding and delinquent or otherwise unsettled debt owed by him to the City of Pawtucket, and agrees that later discovery by the City of Pawtucket Purchasing Agent that this warranty was given in spite of such knowledge, except where the matter is pending in hearing or from any appeal therefrom, shall form reasonable grounds for termination of the contract.

3. SUBCONTRACTS

No subcontracts or collateral agreements shall be permitted, except with the City of Pawtucket's express written consent. Upon request, contractors must submit to the City of Pawtucket Purchasing Office a list of all subcontractors to be employed in the performance of any Purchase Order or other contract arising from this Request.

4. RELATIONSHIP OF PARTIES

The contractor or bidder warrants, by submission of an offer or acceptance of a purchase order or other contract, that he is not an employee, agent, or servant of the City of Pawtucket, and that he is fully qualified and capable in all material regards to provide the specified goods and services. Nothing herein shall be construed as creating any contractual relationship or obligation between the City of Pawtucket and any sub-bidder, subcontractor, supplier, or employee of the contractor or offeror.

5. COSTS OF PREPARATION

All costs associated with the preparation, development, or submission of bids or other offers will be borne by the offeror. The City of Pawtucket will not reimburse any offeror for such costs.

6. SPECIFIED QUANTITY REQUIREMENT

Except where expressly specified to the contrary, all solicitations and contracts are predicated on a specified quantity of goods or services, or for a specified level of funding.

- a. The City of Pawtucket reserves the right to modify the quantity, scope of service, date of delivery or completion, or funding of any contract, with no penalty or charge, by written notice to the contractor, except where alternate terms have been expressly made a part of the contract.
- b. The City of Pawtucket shall not accept quantities in excess of the specified quantity except where the item is normally sold by weight (where sold by weight, the City of Pawtucket will not accept quantities greater than ten per cent [10%] of the specified quantity), or where the Request or Contract provides for awards for other than exact quantities.
- c. Purchase Orders or other contracts may be increased in quantity or extended in term without subsequent solicit with the mutual consent of the contractor and the City of Pawtucket, where determined by the City of Pawtucket Purchasing Agent to be in the City of Pawtucket's best interest.

7. **TERM AND RENEWAL**

Where offers have been requested or contracts awarded for terms exceeding periods of twelve (12) months, it is mutually understood and agreed that the City of Pawtucket's commitment is limited to a base term not to exceed twelve (12) months, subject to renewal annually at the City of Pawtucket's sole option for successive terms as otherwise described, except where expressly specified to the contrary. Purchase orders appearing to commit to obligations of funding or terms of performance may be executed for administrative convenience, but are otherwise subject to this provision, and in such cases the City of Pawtucket's renewal shall be deemed to be automatic, conditional on the continued availability of appropriated funds for the purpose, except as written notice of the City of Pawtucket's intent not to renew is served.
8. **DELIVERY/COMPLETION**

Delivery must be made as ordered and/or projects completed in accordance with the proposal. If delivery qualifications do not appear on the bidder's proposal, it will be interpreted to mean that goods are in stock and that shipment will be made within seven (7) calendar days. If the project completion date is not specified in the proposal, the date shall be determined by the City of Pawtucket Purchasing Agent. The decision of the City of Pawtucket Purchasing Agent, as to reasonable compliance with the delivery terms, and date of completion shall be final. Burden of proof of delay in receipt of order shall rest with the contractor. No delivery charges shall be added to invoices except when authorized on the Purchase Order.
9. **FOREIGN CORPORATIONS**

In accordance with Title 7 Chapter 1.1 ("Business Corporations") of the General Laws of Rhode Island, no foreign corporation shall have the right to transact business in this state until it shall have procured a certificate of authority so to do from the Secretary of State.
10. **PRICING**

All pricing offered or extended to the City of Pawtucket is considered to be firm and fixed unless expressly provided for to the contrary. All prices shall be quoted F.O.B. Destination with freight costs included in the unit cost to be paid by the City of Pawtucket, except, where the Request or Contract permits, offers reflecting F.O.B. Shipping Point will be considered, and freight costs may then be prepaid and added to the invoice.
11. **COLLUSION**

Bidder or contractor warrants that he has not, directly or indirectly, entered into any agree participated in any collusion or otherwise taken any action in restraint of full competitive bidding. In special circumstances, an executed affidavit will be required as a part of the bid.
12. **PROHIBITION AGAINST CONTINGENT FEES AND GRATUITIES**

Bidder or contractor warrants that he has not paid, and agrees not to pay, any bonus, commission, fee, or gratuity to any employee or official of the City of Pawtucket for the purpose of obtaining any contract or award issued by the City of Pawtucket. Bidder or contractor further warrants that no commission or other payment has been or will be received from or paid to any third party contingent on the award of any contract by the City of Pawtucket, except as shall have been expressly communicated to the City of Pawtucket Purchasing Agent in writing prior to acceptance of the contract or award in question. Subsequent discovery by the City of Pawtucket of non-compliance with these provisions shall constitute sufficient cause for immediate termination of all outstanding contracts and suspension or debarment of the bidder(s) or contractor(s) involved.
13. **AWARDS**

Awards will be made with reasonable promptness and by written notice to the successful bidder (only); bids are considered to be irrevocable for a period of ninety (90) days following the bid opening unless expressly provided for to the contrary in the Request, and may not be withdrawn during this period without the express permission of the City of Pawtucket Purchasing Agent.

 - a. Awards shall be made to the bidder(s) whose offer(s) constitutes the lowest responsive price offer (or lowest responsive price offer on an evaluated basis) for the item(s) in question or for the Request as a whole, at the option of the City of Pawtucket. The City of Pawtucket reserves the right to determine those offers which are responsive to the Request, or which otherwise serve its best interests.

- b. The City of Pawtucket reserves the right, before making award, to initiate investigations as to whether or not the materials, equipment, supplies, qualifications or facilities offered by the bidder meet the requirements set forth in the proposal and specification, and are ample and sufficient to insure the proper performance of the contract in the event of award. If upon such examination it is found that the conditions of the proposal are not complied with or that articles or equipment proposed to be furnished do not meet the requirements called for, or that the qualifications or facilities are not satisfactory, the City of Pawtucket may reject such a bid. It is distinctly understood, however, that nothing in the foregoing shall mean or imply that it is obligatory upon the City of Pawtucket to make any examinations before awarding a contract; and it is further understood that if such examination is made, it in no way relieves the contractor from fulfilling all requirements and conditions of the contract.
- c. Qualified or conditional offers which impose limitations of the bidder's liability or modify the requirements of the bid, offers for alternate specifications, or which are made subject to different terms and conditions than those specified by the City of Pawtucket may, at the option of the City of Pawtucket, be
 - 1. rejected as being non-responsive, or
 - 2. set aside in favor of the City of Pawtucket's terms and conditions (with the consent of the bidder), or
 - 3. accepted, where the City of Pawtucket Purchasing Agent determines that such acceptance best serves the interests of the City of Pawtucket.

Acceptance or rejection of alternate or counter-offers by the City of Pawtucket shall not constitute a precedent which shall be considered to be binding on successive solicitations or procurements.

- d. Bids submitted in pencil, or which do not bear an original signature, in ink, by an owner or authorized agent thereof, will not be accepted.
- e. Bids must be extended in the unit of measure specified in the Request. In the event of any discrepancy between unit prices and their extensions, the unit price will govern.
- f. The City of Pawtucket Purchasing Agent reserves the right to determine the responsibility of any bidder for a particular procurement.
- g. The City of Pawtucket Purchasing Agent reserves the right to reject any and all bids in whole or in part, to waive technical defects, irregularities, and omissions, and to give consideration to past performance of the offerors where, in his judgment the best interests of the City of Pawtucket will be served by so doing.
- h. The City of Pawtucket Purchasing Agent reserves the right to make awards by items, group of items or on the total low bid for all the items specified as indicated in the detailed specification, unless the bidder specifically indicates otherwise in his bid.
- i. Preference may be given to bids on products raised or manufactured in the City of Pawtucket or State of Rhode Island, other things being equal.
- j. The impact of discounted payment terms shall not be considered in evaluating responses to any Request.
- k. The City of Pawtucket Purchasing Agent reserves the right to act in the City of Pawtucket's best interests regarding awards caused by clerical errors by the City of Pawtucket Purchasing Office.

14. SUSPENSION AND DEBARMENT

The City of Pawtucket Purchasing Agent may suspend or debar any vendor or potential bidder, for good cause shown:

- a. A debarment or suspension against a part of a corporate entity constitutes debarment or suspension of all of its divisions and all other organizational elements, except where the action has been specifically limited in scope and application, and may include all known corporate affiliates of a contractor, when such offense or act occurred in connection with the affiliate's performance of duties for or on behalf of the contractor, or with the knowledge, approval, or acquiescence of the contractor or one or more of its principals or directors (or where the contractor otherwise participated in, knew of, or had reason to know of the acts).
- b. The fraudulent, criminal or other serious improper conduct of any officer, director, shareholder, partner, employee, or any other individual associated with a contractor may be imputed to the contractor when the conduct occurred in connection with the individual's performance of duties

for or on behalf of the contractor, or with the contractor's knowledge, approval or acquiescence. The contractor's acceptance of benefits derived from the conduct shall be evidence of such knowledge, approval, or acquiescence.

- c. A vendor or contractor who knowingly engages as a subcontractor for a contract awarded by the City of Pawtucket to a vendor or contractor then under a ruling of suspension or debarment by the City of Pawtucket shall be subject to disallowance of cost, annulment or termination of award, issuance of a stop work order, or debarment or suspension, as may be judged to be appropriate by the City of Pawtucket's Purchasing Agent.

15. PUBLIC RECORDS

Contractors and bidders are advised that certain documents, correspondence, and other submissions to the City of Pawtucket's Purchasing Office may be voluntarily made public by the City of Pawtucket absent specific notice that portions of such submittals may contain confidential or proprietary information, such that public access to those items should be withheld.

16. PRODUCT EVALUATION

In all specifications, the words "or equal" are understood after each article when manufacturer's name or catalog are referenced. If bidding on items other than those specified, the bidder must, in every instance, give the trade designation of the article, manufacturer's name and detailed specifications of the item the bidder proposes to furnish; otherwise, the bid will be construed as submitted on the identical commodity described in the detailed specifications. The City of Pawtucket's Purchasing Agent reserves the right to determine whether or not the item submitted is the approved equal the detailed specifications.

- a. Any objections to specifications must be filed by a bidder, in writing, with the City of Pawtucket's Purchasing Agent at least 96 hours before the time of bid opening to enable the City of Pawtucket's Purchasing Office to properly investigate the objections.
- b. All standards are minimum standards except as otherwise provided for in the Request or Contract.
- c. Samples must be submitted to the City of Pawtucket's Purchasing Office in accordance with the terms of the proposals and detailed specifications. Samples must be furnished free of charge and must be accompanied by descriptive memorandum invoices indicating whether or not the bidder desires their return and specifying the address to which they are to be returned (at the bidder's risk and expense), provided they have not been used or made useless by tests; and absent instructions, the samples shall be considered to be abandoned. Award samples may be held for comparison with deliveries.
- d. All samples submitted are subject to test by any laboratory the City of Pawtucket's Purchasing Agent may designate.

17. PRODUCT ACCEPTANCE

All merchandise offered or otherwise provided shall be new, of prime manufacture, and of first quality unless otherwise specified by the City of Pawtucket. The City of Pawtucket reserves the right to reject all nonconforming goods, and to cause their return for credit or replacement, at the City of Pawtucket's option. Contract deliverables specified for procurements of services shall be construed to be work products, and subject to the provisions of this section.

- a. Failure by the City of Pawtucket to discover latent defect(s) or concealed damage or non-conformance shall not foreclose the City of Pawtucket's right to subsequently reject the goods in question.
- b. Formal or informal acceptance by the City of Pawtucket of non-conforming goods shall not constitute a precedent for successive receipts or procurements.
- c. Where the contractor fails to promptly cure the defect or replace the goods, the City of Pawtucket reserves the right to cancel the Purchase Order, contract with a different contractor, and to invoice the original contractor for any differential in price over the original contract price.
- d. When materials, equipment or supplies are rejected, the same must be removed by the contractor from the premises of the City of Pawtucket within forty-eight (48) hours of notification. Rejected items left longer than two days will be regarded as abandoned and the City of Pawtucket shall have the right to dispose of them as its own property.

18. **PRODUCT WARRANTIES**

All product or service warranties normally offered by the contractor or bidder shall accrue to the City of Pawtucket's benefit, in addition to any special requirements which may be imposed by the City of Pawtucket. Every unit delivered must be guaranteed against faulty material and workmanship for a period of one year unless otherwise specified, and the City of Pawtucket may, in the event of failure, order its replacement, repair, or return for full credit, at its sole option.

19. **PAYMENT**

Unless otherwise provided for by the Request or Contract, payment shall not be made until delivery has been made, or services performed, in full, and accepted. Payment shall not be due prior to thirty (30) working days following the latest of completion, acceptance, or the rendering of a properly submitted invoice.

- a. Payment terms other than the foregoing may be rejected as being nonresponsive.
- b. No partial shipments, or partial completion will be accepted, unless provided for by the Request or Contract.
- c. Where a question of quality is involved, or failure to complete a project by the specified due date, payment in whole or part against which to charge back any adjustment required, shall be withheld at the direction of the City of Pawtucket Purchasing Agent. In the event a cash discount is stipulated, the withholding of payments, as herein described, will not deprive the City of Pawtucket from taking such discount.
- d. Payments for used portion of inferior delivery or late delivery will be made by the City of Pawtucket on an adjusted price basis.
- e. Payments on contracts under architectural or engineering supervision must be accompanied by a Certificate of Payment and Statement of Account signed by the architect or engineer and submitted to the City of Pawtucket Purchasing Office for approval.

20. **THIRD PARTY PAYMENTS**

The City of Pawtucket recognizes no assigned or collateral rights to any purchase agreement except as may be expressly provided for in the bid or contract documents, and will not accede to any request for third party or joint payment(s), except as provided for in specific orders by a court of competent jurisdiction, or by express written permission of the City of Pawtucket's Purchasing Agent. Where an offer is contingent upon such payment(s), the offeror is obligated to serve affirmative notice in his bid submission.

21. **SET-OFF AGAINST PAYMENTS**

Payments due the contractor may be subject to reduction equal to the amount of unpaid and delinquent state taxes (or other just debt owed to the State), except where notice of delinquency has not been served or while the matter is pending in hearing or from any appeal therefrom.

22. **CLAIMS**

Any claim against a contractor may be deducted by the City of Pawtucket from any money due him in the same or other transactions. If no deduction is made in such fashion, the contractor shall pay the City of Pawtucket the amount of such claim on demand. Submission of a voucher and payment, thereof, by the City of Pawtucket shall not preclude the City of Pawtucket's Purchasing Agent from demanding a price adjustment in any case when the commodity delivered is later found to deviate from the specifications and proposal.

- a. The City of Pawtucket's Purchasing Agent may assess dollar damages against a vendor or contractor determined to be non-performing or otherwise in default of their contractual obligations equal to the cost of remedy incurred by the City of Pawtucket, and make payment of such damages a condition for consideration for any subsequent award. Failure by the vendor or contractor to pay such damages shall constitute just cause for disqualification and rejection, suspension, or debarment.

23. **CERTIFICATION OF FUNDING**

The Director of Finance shall provide certification as to the availability of funds to support the procurement for the current fiscal year ending June 30th only. Where delivery or service requirements extend beyond the end of the current fiscal year, such extensions are subject to both the availability of appropriated funds and a determination of continued need.

24. **UNUSED BALANCES**
Unless otherwise specified, all unused Blanket Order quantities and/or unexpended funds shall be automatically canceled on the expiration of the specified term. Similarly, for orders encompassing more than one fiscal year, unexpended balances of funding allotted for an individual fiscal year may be liquidated at the close of that fiscal year, at the City of Pawtucket's sole option.
25. **MINORITY BUSINESS ENTERPRISES**
Pursuant to the provisions of Title 37 Chapter 14.1 of the General Laws, the City of Pawtucket reserves the right to apply additional consideration to offers, and to direct awards to bidders other than the responsive bid representing the lowest price where:
- a. the offer is fully responsive to the terms and conditions of the Request, and
 - b. the price offer is determined to be within a competitive range (not to exceed 5% higher than the lowest responsive price offer) for the product or service, and
 - c. the firm making the offer has been certified by the R.I. Department of Economic Development to be a small business concern meeting the criteria established to be considered a Minority Business Enterprise.
26. **PREVAILING WAGE REQUIREMENT**
In accordance with Title 37 Chapter 13 of the General Laws of Rhode Island, payment of the general prevailing rate of per diem wages and the general prevailing rate for regular, overtime and other working conditions existing in the locality for each craft, mechanic, teamster, or type of workman needed to execute this work is a requirement for both contractors and subcontractors for all public works.
27. **EQUAL OPPORTUNITY COMPLIANCE, HANDICAPPED ACCESS AND AFFIRMATIVE ACTION**
Contractors of the City of Pawtucket are required to demonstrate the same commitment to equal opportunity as prevails under federal contracts controlled by Federal Executive Orders 11246, 11625, 11375 and 11830, and Title 28 Chapter 5.1 of the General Laws of Rhode Island. Affirmative action plans shall be submitted by the contractor for review by the State Equal Opportunity Office. A contractor's failure to abide by the rules, regulations, contract terms and compliance reporting provisions as established shall be grounds for forfeiture and penalties as shall be established, including but not limited to suspension.
28. **DRUG-FREE WORKPLACE REQUIREMENT**
Contractors who do business with the City of Pawtucket and their employees shall abide by the State's drug-free workplace policy and the contractor shall so attest by signing a certificate of compliance.
29. **TAXES**
The City of Pawtucket is exempt from payment of excise, transportation and sales tax imposed by the Federal or State Government. These taxes should not be included in the proposal price. Exemption Certificates will be furnished upon request.
30. **INSURANCE**
Refer to "Specifications" document, Section 00721, titled "General Conditions", Article 30, titled "Insurances".
31. **BID SURETY**
When requested, a bidder must furnish a Bid Bond or Certified Check for 10% of his bid, or for the stated amount shown in the solicitation. Bid Bonds must be executed by a reliable Surety Company authorized to do business in the State of Rhode Island. Failure to provide Bid Surety with bid may be cause for rejection of bid. The Bid Surety of any three bidders in contention will be held until an award has been made according to the specifications of each proposal. All others will be returned by mail within 48 hours following the bid opening. Upon award of a contract, the remaining sureties will be returned by mail unless instructed to do otherwise.

32. PERFORMANCE AND LABOR AND PAYMENT BONDS

A performance bond and labor and payment bond of up to 100% of an award may be required by the City of Pawtucket's Purchasing Agent. Bonds must meet the following requirements:

- a. Corporation: The Bond must be signed by an official of the corporation above his/her official title and the corporate seal must be affixed over his/her signature.
- b. Firm or Partnership: The Bond must be signed by all of the partners and must indicate that they are "Doing Business As (name of firm)."
- c. Individual: The Bond must be signed by the individual owning the business and indicate "Owner."
- d. The Surety Company executing the Bond must be licensed to do business in the State of Rhode Island or Bond must be countersigned by a company so licensed.
- e. The Bond must be signed by an official of the Surety Company and the corporate seal must be affixed over his signature.
- f. Signatures of two witnesses for both the principal and the Surety must appear on the Bond.
- g. A Power of Attorney for the official signing of the Bond for the Surety Company must be submitted with the Bond.

33. SUSPENSION, DEFAULT AND TERMINATION

a. Suspension of a Contract by the City of Pawtucket

The City of Pawtucket reserves the right at any time and for any reason to suspend all or part of this contract, for a reasonable period, not to exceed sixty days, unless the parties agree to a longer period. The City of Pawtucket shall provide the contractor with written notice of the suspension order signed by the Purchasing Agent or his or her designee, which shall set forth the date upon which the suspension shall take effect, the date of its expiration, and all applicable instructions. Upon receipt of said order, the contractor shall immediately comply with the order and suspend all work under this contract as specified in the order. The contractor shall take all reasonable steps to mitigate costs and adverse impact to the work specified in the contract during the suspension period. Before the order expires, the City of Pawtucket shall either:

1. cancel the suspension order;
2. extend the suspension order for a specified time period not to exceed thirty (30) days;
or
3. terminate the contract as provided herein.

The contractor shall resume performance once a suspension order issued under this section is canceled or expires. If as a result of the suspension of performance, there is a financial or schedule impact upon the contract, an appropriate adjustment may be made by, or with the approval of, the City of Pawtucket's Purchasing Agent. Any adjustment shall be set forth in writing. After a suspension order has been canceled or expires, the contractor shall provide any request for adjustment to the City of Pawtucket's Purchasing Agent within thirty (30) days after resuming work performance.

b. Termination of a Contract by the City of Pawtucket

1. Termination for Default or Nonperformance

If, for any reason, the contractor breaches the contract by failing to satisfactorily fulfill or perform any obligations, promises, terms, or conditions, and having been given reasonable notice of and opportunity to cure such default, fails to take satisfactory corrective action within the time specified by the City of Pawtucket, the City of Pawtucket may terminate the contract, in whole or in part, the termination of all outstanding contracts or sub-contracts held by the contractor, and the suspension or debarment of the contractor from future procurements by giving written notice to the contractor specifying the date for termination. The City of Pawtucket shall endeavor to provide such notice at least seven (7) calendar days before the effective date of the termination.

A contractor who fails to commence within the time specified or complete an award made for repairs, alterations, construction, or any other service will be considered in default of contract. If contractor consistently fails to deliver quantities or otherwise perform as specified, the City of Pawtucket's Purchasing Agent reserves the right to terminate the contract and contract for completion of the work with another contractor and seek recourse from the defaulting contractor or his surety. In the event of a termination for default or nonperformance, in whole or in part, the City of Pawtucket may procure similar goods or services in a manner and upon terms it deems appropriate, and the contractor shall be liable for the excess costs incurred by the City of Pawtucket as a result of the contractor's default. The contractor, or its surety, agrees to promptly reimburse the City of Pawtucket for the excess costs, but shall have no claim to the difference should the replacement cost be less.

2. Termination Without Cause

The City of Pawtucket may terminate the contract in whole or in part without cause at any time by giving written notice to the contractor of such termination at least thirty (30) days before the effective date of such termination. The notice shall specify the part(s) of the contract being terminated and the effective termination date.

Within thirty (30) days of the effective date of the termination of the contract the contractor shall compile and submit to the City of Pawtucket an accounting of the work performed up to the date of termination. The City of Pawtucket may consider the following claims in determining reasonable compensation owed to the contractor for work performed up to the date of termination:

- a. contract prices for goods or services accepted under the contract;
- b. costs incurred in preparing to perform and performing the terminated portion of the contract; or
- c. any other reasonable costs incurred by the contractor as a result of the termination.

The total sum to be paid to the contractor shall not exceed the total contract price, less any payments previously made to the contractor, the proceeds from any sales of goods or manufacturing materials, and the contract price for work not terminated.

3. Contractor's Obligations in the Event of Termination

If the contract is terminated for any reason, or expires pursuant to its terms, the contractor shall transfer and deliver to the City of Pawtucket in the manner and to the extent directed by the City of Pawtucket:

- a. all finished or unfinished material prepared by the contractor; and
- b. all material, if any, provided to the contractor by the City of Pawtucket.

For the purposes of the contract, "material" shall include, but is not limited to, goods, supplies, parts, tools, machinery, equipment, furniture, fixtures, information, data, reports, summaries, tables, maps, charts, photographs, studies, recommendations, files, audiotapes, videotapes, records, keys, security badges, and documents.

If the contract is terminated for cause, the contractor shall not be relieved of liability to the City of Pawtucket for damages sustained because of any breach by the contractor. In such event, the City of Pawtucket may retain any amounts which may be due and owing to the contractor until such time as the exact amount of damages due the City of Pawtucket from the contractor has been determined by the City of Pawtucket Purchasing Agent. The City of Pawtucket may also set off any damages so determined against the amounts retained.

Upon termination of the contract, the contractor shall stop performance on the date specified, terminate any outstanding orders and subcontracts applicable to the terminated portion of the

contract, and shall incur no further commitments or obligations in connection with the terminated performance. The contractor shall settle all liabilities and claims arising out of the termination of subcontracts and order generating from the terminated performance. The City of Pawtucket may direct the contractor to assign the contractor's right, title and interest under terminated orders or subcontracts to the City of Pawtucket or a third party.

Terminations of Purchase Order Contracts or Master Pricing Agreements shall require the signature of the City of Pawtucket Purchasing Agent or his designee. Notice of termination by either party shall be submitted in writing to the other party in accordance with the termination clause of the contract, or where no specific termination clause is included, written notice shall be provided no later than thirty (30) days before the expiration of the contract.

34. INDEMNITY

The contractor guarantees:

- a. To save the City of Pawtucket, its agents and employees, harmless from any liability imposed upon the City of Pawtucket arising from the negligence, either active or passive, of the contractor, as well as for the use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, article or appliance furnished or used in the performance of the contract of which the contractor is not the patentee, assignee or licensee.
- b. To pay for all permits, licenses and fees and give all notices and comply with all laws, ordinances, rules and regulations of the City of Pawtucket and of the State of Rhode Island.
- c. That the equipment offered is standard new equipment, latest model of regular stock product with all parts regularly used with the type of equipment offered; also, that no attachment or part has been substituted or applied contrary to manufacturer's recommendations and standard practice.

35. CONTRACTOR'S OBLIGATIONS

In addition to the specific requirements of the contract, construction and building repair contractors bear the following standard responsibilities:

- a. To furnish adequate protection from damage for all work and to repair damages of any kind, for which he or his workmen are responsible, to the building or equipment, to his own work, or to the work of other contractors;
- b. The contractor, its subcontractor(s) and their employees and/or agents, shall protect and preserve property in the contractor or subcontractor's possessions in which the City of Pawtucket has an interest, and any and all materials provided to the contractor or subcontractor by the City of Pawtucket;
- c. To clear and remove all debris and rubbish resulting from his work from time to time, as directed or required, a completion of the work leave the premises in a neat unobstructed condition, broom clean, and in satisfactory order and repair;
- d. To store equipment, supplies, and material at the site only upon approval by the City of Pawtucket, and at his own risk;
- e. To perform all work so as to cause the least inconvenience to the City of Pawtucket, and with proper consideration for the rights of other contractors and workmen;
- f. To acquaint themselves with conditions to be found at the site, and to assume responsibility for the appropriate dispatching of equipment and supervision of his employees during the conduct of the work;
- g. To ensure that his employees are instructed with respect to special regulations, policies, and procedures in effect for any City of Pawtucket facility or site, and that they comply with such rules, including but not limited to security policies or practices and/or criminal background checks for any employees and/or subcontractors;
- h. The contractor shall ensure that its employees or agents are experienced and fully qualified to engage in the activities and services required under the contract;
- i. The contractor shall ensure that at all times while services are being performed under this contract at least one of its employees or agents on the premises has a good command of the English language and can effectively communicate with the City of Pawtucket and its staff;

- j. The contractor and contractor's employees or agents shall comply with all applicable licensing and operating requirements required by federal or state law and shall meet accreditation and other generally accepted standards of quality in the applicable field of activity;
- k. The contractor shall secure and retain all employee-related insurance coverage for its employees and agents as required by law; and
- l. The contractor, subcontractor, and his or her employees and agents shall not disclose any confidential information of the City of Pawtucket to a third party. Confidential information means:
 - (1) any information of a sensitive or proprietary nature, whether or not specially identified as confidential or proprietary; or
 - (2) any information about the City of Pawtucket gained during the performance of a contract that is not already lawfully in the public domain.

36. **FORCE MAJEURE**

All orders shall be filled by the contractor with reasonable promptness, but the contractor shall not be held responsible for any losses resulting if the fulfillment of the terms of the contract shall be delayed or prevented by wars, acts of public enemies, strikes, fires, floods, acts of God, or for any other acts not within the control of the contractor and which by the exercise of reasonable diligence, the contractor is unable to prevent.

PAWTUCKET WATER SUPPLY BOARD
PAWTUCKET, RHODE ISLAND

SPECIFICATIONS

FOR

BID No. 24-041

CONTRACT MR-14

SPRING 2024

WATER DISTRIBUTION SYSTEM IMPROVEMENTS
MAIN REPLACEMENT



TABLE OF CONTENTS

DIVISION 0-BIDDING REQUIREMENTS

- 00100 INFORMATION FOR BIDDERS
- 00200 RELEVANT FEDERAL AND STATE LAWS

CONTRACT DOCUMENTS

- 00530 CONTRACT FORMS
- 00600 PERFORMANCE BOND
- 00610 PAYMENT BOND
- 00620 CERTIFICATE OF OWNER'S ATTORNEY
- 00721 GENERAL CONDITIONS
- 00723 SPECIAL CONDITIONS

DIVISION 1-GENERAL REQUIREMENTS

- 01041 PROJECT COORDINATION
- 01045 CUTTING AND PATCHING
- 01152 APPLICATION FOR PAYMENT
- 01153 CHANGE ORDER PROCEDURES
- 01340 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES
- 01410 TESTING LABORATORY SERVICES
- 01500 TEMPORARY YARD, FIELD OFFICE, AND FACILITIES **OMITTED**
- 01570 TRAFFIC CONTROL
- 01576 PROTECTION OF TRAFFIC, PERSONS, AND PROPERTY
- 01600 MATERIAL AND EQUIPMENT
- 01700 CONTRACT CLOSE-OUT
- 01710 CLEANING

DIVISION 2-SITE WORK

02015 TEST PITS

02019 WORK CREW TIME DELAY

02211 EARTH TRENCH EXCAVATION AND BACKFILL

02221 ROCK REMOVAL

02377 EXCAVATION SUPPORT SYSTEMS

02401 DEWATERING, CONTROL AND DIVERSION OF WATER

02486 RESTORATION OF LAWNS AND RIGHT OF WAY AREAS

02513 PAVEMENT RESTORATION

02615 DUCTILE IRON WATER MAINS AND APPURTENANCES

02640 GATE AND BUTTERFLY VALVES, TAPPING SLEEVE AND VALVES,
INSERTION VALVES, LINSTOPS, VALVE BOXES AND APPURTENANCES

02644 FIRE HYDRANTS

02650 WATER SERVICE LINES

02700 CLEANING AND LINING WATER MAINS **OMITTED**

02710 TESTING AND DISINFECTING WATER MAINS

02713 INSTALLATION OF WATER PIPELINE SYSTEMS

02750 TEMPORARY BY-PASS PIPING AND SERVICES

DIVISION 3-CONCRETE

03310 MISCELLANEOUS CONCRETE WORK

APPENDIX "A"

PAWTUCKET WATER SUPPLY BOARD
PRESSURE AND DISINFECTION PROCEDURE

APPENDIX "B"

PROPOSED PROJECT STREETS LISTING

DIVISION 0 - BIDDING REQUIREMENTS

SECTION 00100
INFORMATION FOR BIDDERS

INDEX TO INFORMATION FOR BIDDERS

| <u>ARTICLE</u> | <u>TITLE</u> |
|----------------|---|
| 1 | -----RECEIPT AND OPENING OF BIDS |
| 2 | -----LOCATION AND DESCRIPTION OF WORK |
| 3 | -----SEQUENCE OF WORK |
| 4 | -----TIME OF COMPLETION AND LIQUIDATED DAMAGES |
| 5 | -----PREPARATION OF PROPOSAL |
| 6 | -----AMENDMENTS TO THE BID |
| 7 | -----BID SECURITY |
| 8 | -----SUBMISSION OF PROPOSALS |
| 9 | -----WITHDRAWAL OF PROPOSAL |
| 10 | -----RETURN OF BID SECURITY |
| 11 | -----METHOD OF BIDDING |
| 12 | -----METHOD OF AWARD-LOWEST QUALIFIED BIDDER |
| 13 | -----CORRECTIONS |
| 14 | -----RIGHT TO REJECT PROPOSALS |
| 15 | -----EQUAL BIDS |
| 16 | -----BALANCED BIDDING |
| 17 | -----ACCEPTANCE AND AWARD OF CONTRACT |
| 18 | -----QUALIFICATIONS OF BIDDERS |
| 19 | -----REQUIREMENTS OF PERFORMANCE BOND |
| 20 | -----POWER OF ATTORNEY |
| 21 | -----LIQUIDATED DAMAGES FOR FAILURE TO ENTER CONTRACT |
| 22 | -----OBLIGATION OF BIDDER |
| 23 | -----CONDITIONS OF WORK |

| | |
|----|--|
| 24 | -----PERSONAL EXAMINATION |
| 25 | -----ERRORS, ADDENDA AND INTERPRETATIONS |
| 26 | -----INTENT OF CONTRACT DOCUMENTS |
| 27 | -----LAWS AND REGULATIONS |
| 28 | -----WORK ON STATE, MUNICIPAL AND PRIVATE PROPERTY |
| 29 | -----USE OF STREET DURING CONSTRUCTION |
| 30 | -----UTILITIES AND AUTHORITIES |
| 31 | -----NOTICE OF SPECIAL CONDITIONS |
| 32 | -----CONTRACT |
| 33 | -----PRICES |
| 34 | -----ITEMS NOT LISTED IN THE BID |
| 35 | -----UNCERTAINTY OF QUANTITIES |
| 36 | -----MANUFACTURER'S EXPERIENCE |
| 37 | -----PREBID CONFERENCE |
| 38 | -----PRECONSTRUCTION CONFERENCE |
| 39 | -----INSURANCES |
| 40 | -----TAXES |
| 41 | -----WINTER-TIME SHUTDOWN PERIOD |

SECTION 00100

INFORMATION FOR BIDDERS

ARTICLE 1. RECEIPT AND OPENING OF BIDS:

The Pawtucket Water Supply Board, acting herein through its Chairman (herein called the "Owner"), invites bids on the forms attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the Owner at the Office of the Purchasing Agent, City Hall, 137 Roosevelt Avenue, Pawtucket, Rhode Island, 02860, as stated in the Advertisement for Bids, at which time they will be publicly opened and read aloud. The envelopes containing the bids must be sealed, addressed to the Central Purchasing Board, Office of the Purchasing Agent, City Hall, 137 Roosevelt Avenue, Pawtucket, Rhode Island, 02860, and designated as "BID FOR CONTRACT MR-14".

ARTICLE 2. LOCATION AND DESCRIPTION OF WORK:

The work consists of, but is not necessarily limited to, furnishing all labor, equipment, appurtenances and incidentals, and performing all operations in connection with the REPLACEMENT/INSTALLATION OF APPROXIMATELY 29,500 LINEAR FEET OF 6", 8", and 12" DUCTILE IRON MAIN including excavation and backfill, restoration of pavement surfaces, lawns, and rights-of-way; furnishing and installing all ductile iron pipe, valves, fire hydrants, bends, thrust blocks, water service materials, and temporary by-pass service pipe for maintaining water service as required, all as specified in these documents. All work completed under this project shall conform to the applicable standards of the American Water Works Association (AWWA) Standards; Rules and Regulations Pertaining to Public Drinking Water as promulgated by the RI Department of Health, latest edition; Recommended Standards for Water Works (Ten States Design Standards), latest edition. All water treatment chemicals shall comply with NSF/ANSI Standard 60; all water treatment and/or distribution system products shall comply with NSF/ANSI Standard 61.

ARTICLE 3. SEQUENCE OF WORK:

Based upon a Notice to Proceed for the contract work included in the TOTAL BASE BID (Proposal), the work sequence shall be determined at the preconstruction meeting. Work shall be divided and performed over two construction seasons (i.e., 2024 and 2025 construction seasons).

- | | | |
|----|----|-----|
| 1. | 5. | 9. |
| 2. | 6. | 10. |
| 3. | 7. | 11. |
| 4. | 8. | 12. |

The remaining streets not listed above may be scheduled in any order. The owner may alter the above priority schedule, as necessary, if certain conditions warrant any changes.

The successful bidder shall submit to the Owner, in writing, a detailed time schedule delineating the order in which he intends to carry out the work under this contract. Refer to Article 38 of the Special Conditions.

ARTICLE 4. TIME OF COMPLETION AND LIQUIDATED DAMAGES:

The bidder must agree to complete all work under this contract within **730 consecutive calendar days** of the Owners written "Notice to Proceed" **including the winter shutdown period**, and to remove all equipment, debris, supplies, barriers, temporary piping, etc., from the work areas and render all areas in the vicinity of the work in a clean, unobstructed and unobtrusive condition. There is a \$1,000.00 per day penalty for each consecutive calendar day after the 730 day time of completion limit until actual completion.

ARTICLE 5. PREPARATION OF PROPOSAL:

- (a) Bidders shall be advised that State of Rhode Island prevailing wage rates will apply to this project.
- (b) USE OF SEPARATE BID FORMS. These Contract Documents include a complete set of bidding and Contract forms which are for the convenience of bidders and are not to be detached from the Contract Documents, filled out, and executed. Separate copies of Bid Forms will be furnished for that purpose. **BIDS MUST BE SUBMITTED IN DUPLICATE.** All blank spaces must be filled in correctly, in ink where indicated for each and every item. Proposals must give the prices proposed both in words and figures, and no changes shall be made in the forms or in the items mentioned therein. Erasures and other changes in the bid must be explained or noted over the initials of the bidder. In the event of any discrepancy between the written amounts and figures, the written amounts shall govern.
- (c) The bidder shall sign his proposal in the blank space provided for this purpose. If the proposal is made by a partnership or corporation, the name and address of the partnership or corporation shall be indicated, together with the names and addresses of the partners or officers. If the proposal is made by a partnership, it must be acknowledged by one of the partners; if made by a corporation, by one of the officers. Bidders shall furnish with their proposals the following:
 - 1. Contractor's Qualification Statement
 - 2. Bid Bond
 - 3. Proposed Subcontractors
 - 4. Non-Collusive Bid Statement

The information required under (1) to (4) inclusive, shall be furnished on the forms included in the bound proposal.

ARTICLE 6. AMENDMENTS TO THE BID

No oral, written or telegraphic amendments to this bid will be accepted. A bidder wishing to amend his bid after transmittal to the Owner may do so only by amending the Bid Document itself prior to the time for opening bids.

ARTICLE 7. BID SECURITY

- (a) Each bid must be accompanied by cash, certified check or a bid bond duly executed by the bidder as Principal and having as surety thereon an approved surety, in the amount of ten percent (10%) of the total amount of the Total Base Bid as a guarantee that in case a contract is awarded to him he will execute such contract.
- (b) The surety on the bid bond must be a corporate surety licensed to sign surety bonds in the State of Rhode Island and also listed by the United States Department of the Treasury in its latest lists as a qualified surety acceptable to the United States Government (Department Circular 570). No bid bonds will be accepted if the amount of the bond is less than ten percent (10%) of the TOTAL BASE BID for the contract or if the amount of the bond exceeds the limit for which the United States Treasury Department has qualified the surety any one bond. Deposits accompanying bids shall be sealed in the bid envelope.

ARTICLE 8. SUBMISSION OF PROPOSALS:

- (a) Proposals must be submitted not later than the time specified in the Advertisement, unless the time for the opening of proposals has been postponed as hereinafter provided.
- (b) Proposals when submitted must be enclosed in sealed inner and outer envelopes and both envelopes must have written on them, plainly, the name and address of the bidder, the RFP/BID No., the Contract and the Project Name/Description to which it refers. Both envelopes shall then be securely sealed. The outer envelope shall be addressed to the Pawtucket City Hall - Purchasing Office, 137 Roosevelt Avenue, Pawtucket, Rhode Island 02860. Both envelopes shall be clearly labeled "BID DOCUMENTS" and the Bid Opening date so as to guard against opening prior to the time set therefore, and no blame shall be attached to any agent or employee of the City for the opening of any bid not so marked.

ARTICLE 9. WITHDRAWAL OF PROPOSAL

The bidder may withdraw his proposal personally or by written or telegraphic request dispatched by the Bidder in time for delivery in the normal course prior to the hour fixed for opening of the Bids, provided that written confirmation of any telegraphic withdrawal over the signature of the Bidder is placed in the mail and postmarked prior to the time set for bid opening. Negligence on the part of the Bidder in preparing his bid confers no right of withdrawal or modification of his bid after such bid has been opened.

ARTICLE 10. RETURN OF BID SECURITY

Cash, certified checks or bid bonds will be returned to all except the three apparently lowest formal bidders within approximately two (2) weeks after the formal opening of the bids. The remaining cash, certified checks or bid bonds will be returned promptly after the Owner and the successful Bidder has executed the proposed contract, or if any one of the proposed contracts has not then been executed within 90 days after the date of the opening of the bids. If the bid holding period is to be extended beyond 90 days, by mutual agreement of the Owner and Bidder, the Bidder may demand his security at any time thereafter, so long as he has not been notified of the acceptance of his bid. The applicable requirements pertaining to the bid bond shall also apply to the certified check.

ARTICLE 11. METHOD OF BIDDING:

The owner invites the following bid:

For CONTRACT MR-14 together with all related incidental and appurtenant work as shown on the Contract Drawings and as described and outlined in the Contract Specifications.

ARTICLE 12. METHOD OF AWARD - LOWEST QUALIFIED BIDDER:

Bids will be compared on the basis of the experience of the bidder, and on the lowest TOTAL BID listed in the bid proposal.

ARTICLE 13. CORRECTIONS:

Erasures or other changes in the bid must be explained or noted over the signature of the bidder.

ARTICLE 14. RIGHT TO REJECT PROPOSALS:

The Owner reserves the right to reject any and all proposals or to accept the proposal or proposals which in its judgment will be for the best interests of the Owner. Any proposals which contain any omissions, alterations of form, additions or alternates not called for, erasures or corrections which fail to conform to the regulations stated herein, may be disregarded and rejected as improper, except that the Owner may waive any defects or irregularities. Any proposals which are submitted or received after the scheduled closing time for the receipt of proposals will be rejected. Proposals in which the prices obviously are unbalanced may be rejected.

ARTICLE 15. EQUAL BIDS:

When two or more bids are equal in all respects, award shall be made by lot which shall be witnessed by at least three persons and which may be attended by the bidders or their representatives.

ARTICLE 16. BALANCED BIDDING:

Bids should be made on each separate item of work shown in the bid (proposal) with reasonable relation to the probable cost of doing the work included in such item, and the right is reserved to reject wholly any bid in case an item or items thereof are obviously unbalanced, under the minimum unit price, or appear to the Owner to be so unbalanced as to affect or be liable to affect adversely any interests of the Owner. The attention of the bidder is called to the fact that unbalancing of bids may adversely affect the Contractor if certain portions of the work are increased or decreased as provided in the Contract Documents.

ARTICLE 17. ACCEPTANCE AND AWARD OF CONTRACT:

- (a) Within 90 days after the opening of the bids, unless extended by mutual agreement of the Owner and the bidder, the Owner will accept one of the bids or will reject all bids. Acceptance of the bid and Notice of Award will be in writing signed by an officer of the Owner and mailed to the address designated in the Proposal. The notice shall contain appropriate instructions and information as to the time and place set for the execution of the contract. The successful bidder or his duly authorized representatives shall appear at the time and place designated and shall execute the contract and furnish all bonds and certificates of insurance which may be required.
- (b) A contract will not be awarded to any corporation, firm or individual who is in arrears to the Owner by debt or contract, or who is in default as security or otherwise by an obligation to the Pawtucket Water Supply Board.

ARTICLE 18. QUALIFICATIONS OF BIDDERS:

- (a) The Owner may make such investigation as it deems necessary to determine the ability of the bidder to perform the work within the allotted contract duration and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any proposal if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein, or indicates that such bidder has previously failed to properly perform or complete on time any contract. Conditional bids will not be accepted.
- (b) Each Bidder shall complete and furnish with his/her proposal the Contractor's Qualification Statement on the forms provided herein.

ARTICLE 19. REQUIREMENTS OF PERFORMANCE BOND:

- (a) Upon the execution of the contract, the Contractor shall furnish a Performance Bond and a Labor and Material Bond, both issued simultaneously in the amount of at least equal to 100 percent of the bid price as security for faithful performance of the contract and for the payment of all persons performing labor on the project under the contract and furnishing materials in connection with the contract. The bonds shall be submitted utilizing "Industry Standard" type forms for such contract documents. Acceptable bond documents to be furnished by the Contractor

shall be AIA Document A312 (latest revision) or EJCDC Documents C-160 and C-615 (latest revisions). The surety on the bonds must be a corporate surety and must meet the requirements stated under Bid Security hereof except that the amount of the bonds may exceed the limit for which the United States Treasury Department has qualified the Surety if the excess is reinsured with surety companies that are qualified on the United States Treasury Department list for an amount equal to the amount of the reinsurance. Written evidence of how any excess suretyship has been placed by the Surety signing the bond must accompany the bond.

- (b) If the Contractor is a partnership, the bonds should be signed by each of the individuals who are partners; if a corporation, the bonds should be signed in the correct corporation name by a duly authorized officer, agent or attorney-in-fact. There should be executed an appropriate number of counterparts of the bonds corresponding to the number of counterparts of the contract. Each executed bond should be accompanied by (1) appropriate acknowledgments of the respective parties; (2) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Contractor or Surety; (3) a duly certified extract from by-laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued.

ARTICLE 20. POWER OF ATTORNEY:

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

ARTICLE 21. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

The successful bidder, upon his failure or refusal to execute and deliver the contract and bonds required within five (5) days after he has received "Notice of Award" indicating the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid.

ARTICLE 22. OBLIGATION OF BIDDER:

At the time of the opening of the bids each bidder will be presumed to have inspected the site of the work, to have read and to be thoroughly familiar with the Contract Documents (including all addenda). The failure or omission of any bidder to receive or examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect of his bid.

ARTICLE 23. CONDITIONS OF WORK:

Each bidder must inform himself fully of the conditions relating to the construction and labor under which the work is now or will be performed; failure to do so will not relieve the successful bidder of his obligation to furnish all materials and all labor necessary to carry out the provisions of the Contract Documents, and to complete the contemplated work for the consideration set forth in his bid. Insofar as possible, the Contractor, in the carrying out of his work, must employ such methods or means as will not cause interruption or undue

interference with traffic, the use of existing facilities and utilities, the use of municipally, state or privately owned lands, or with the work being performed by others. The Contractor must satisfy himself by his own investigation and research as to the nature and location of the work, the general and local conditions, including but not restricted to those bearing upon underground pipes and structures, subsurface soil conditions including rock and groundwater, transportation, disposal, handling and storage of materials, water, electric power, roads, means of access, the construction and making of connections of the work to existing facilities and utilities, the locations of existing utilities and structures affecting the work, or other similar conditions at the site, the character of equipment and facilities needed preliminary to and during prosecution of the work, requirements of owners and controlling authorities having jurisdiction over the various lands, existing structures, facilities and utilities, and all other conditions affecting the work to be done and labor and materials needed, and make his bid in sole reliance thereon, and shall not at any time after submission of a bid assert that there was any misunderstanding in regard to the nature or amount of the work to be done.

ARTICLE 24. PERSONAL EXAMINATION:

Bidders are required to submit their bids upon the following express conditions, which shall apply to and become a part of every bid received, namely: Bidders must satisfy themselves, by personal examination at the site of the proposed work and by such other means as they may prefer, as to the actual conditions, requirements and limits of the proposed work, and as to the accuracy of information and statements herein contained. The submission of any bid will be accepted by the Owner as satisfactory proof that the bidder has satisfied himself in these respects. The Contractor shall not at any time after the submission of a bid dispute or complain of such statements or information, nor assert that there was any misunderstanding in regard to the nature of, or amount of work to be done.

ARTICLE 25. ERRORS, ADDENDA AND INTERPRETATIONS:

- (a) If a bidder finds any omissions, discrepancies or errors in the Contract Documents or is in doubt as to the meaning of the Plans, Specifications or other Contract Documents, he should notify the Owner in writing who may correct, amend or clarify such documents by an interpretation or addendum. If such bidder fails to notify the Owner he will be held rigidly to the Owner's interpretation of the plans and specifications after the contract is executed.
- (b) No interpretation of the meaning of the plans, specifications or other Contract Documents will be made to any bidder orally. Every request for such interpretation should be in writing addressed to the Owner and to be given consideration must be received at least seven (7) days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be mailed by registered mail with return receipt requested to all prospective bidders (at the respective addresses furnished for such purposes) not later than three (3) days prior to the date fixed for the opening of bids.
- (c) If the Owner shall deem any matter arising thereafter of such importance as to require correction, amendment or clarification, it may postpone the

time for the opening of bids by notifying each prospective bidder of such postponement by telegraph or telephone and issue an additional addendum. Failure of any bidder to receive any addendum shall not relieve the bidder from any obligations under his bid if such addendum is actually sent to the bidder at the address furnished by him at the time he obtains copies of the Contract Documents. All addenda so issued shall become part of the Contract Documents.

ARTICLE 26. INTENT OF CONTRACT DOCUMENTS:

The intent of the Contract Documents is to obtain a complete project in a first-class workmanlike manner and it shall be understood that the bidder has satisfied himself as to the complete requirements of the contract and has prepared his proposal upon such understanding.

ARTICLE 27. LAWS AND REGULATIONS:

The bidder's attention is directed to the fact that all applicable Federal, State and Municipal laws, ordinances, rules and regulations, codes of all authorities having jurisdiction over construction work in the locality of the project shall apply to the contract throughout and they are deemed to be included herein the same as though herein written out in full; this includes the municipality's equal opportunity requirements.

ARTICLE 28. WORK ON STATE, MUNICIPAL AND PRIVATE PROPERTY:

Particular attention is hereby directed to the fact that portions of the work included under this contract may have to be done within the limits of properties that are State-owned, municipally-owned and privately-owned. The Contractor shall be responsible for coordinating the prosecution of the work in accordance with additional requirements as specified herein under "SPECIAL CONDITIONS".

ARTICLE 29. USE OF STREETS DURING CONSTRUCTION:

The streets concerned with this contract are regularly traveled and the location of the work is such that the streets shall be open to abutters and to through traffic.

The Contractor shall coordinate the services of a special police detail to direct traffic during construction, as required, by the Specifications, as ordered by the Police Department, or as otherwise directed by the Owner; shall provide and maintain from the beginning of twilight through the whole of every night on or near all obstructions, excavations or points of danger on the work, sufficient guards and barricades to protect traffic from injury; shall take such other precautions as may be necessary to protect life and property, and shall be liable for all damages occasioned in any way by his act or neglect or that of his agents or servants.

Insofar as possible, all streets and rights-of-way shall remain open. However, should it be necessary to close or restrict any street, the Contractor shall notify the Owner prior to closing or restricting any such street, and shall coordinate any such closing or restriction with the local Police and Fire Department so as to allow for the free movement of emergency vehicles to the satisfaction of the respective detour signs, barricades and lights for the safety of the public.

Where it is necessary to interfere with private ways, roads or driveways, the Contractor shall give reasonable notice to the Owners thereof prior to such interference, and shall, at his own expense, provide suitable and safe bridges or other sufficient crossings for the accommodation of the travel thereon, shall maintain the same in good and safe condition until the said private ways, road or driveways are usable to the satisfaction of the Owner. As the work progresses, and at the end of each work day, the Contractor shall remove and dispose of all debris and materials resulting from the construction operations, and shall render the work areas in a clean, unobstructed and unobtrusive condition.

ARTICLE 30. UTILITIES AND AUTHORITIES:

The bidders are referred to the following utility companies and other agencies for information regarding existing structures and other facilities which they own or control and which may be encountered within or adjacent to the work limits.

State of Rhode Island
Utilities Underground Plant
Damage Prevention System
(DIG SAFE)
1-888-344-7233

Water Mains
Pawtucket Water Supply Board
85 Branch Street
Pawtucket, Rhode Island 02860
401-729-5000

Pawtucket Police
Pawtucket Police Department
121 Roosevelt Avenue
Pawtucket, RI 02860
401-726-3911

Local Cumberland Roads
Town of Cumberland
Public Works Department
45 Broad Street
Cumberland, RI 02864
401-728-2400

Cumberland Police
Cumberland Police Department
1380 Diamond Hill Road
Cumberland, RI 02864
401-333-2500

Cumberland Fire
Valley Falls Fire District
555 High Street
Cumberland, RI 02864
401-722-5992

Municipal Pawtucket Roads
City of Pawtucket
Public Works Department
250 Armistice Boulevard
Pawtucket, RI 02860
401-728-0500

Pawtucket Fire Department
Pawtucket Fire Department
145 Roosevelt Avenue
Pawtucket, RI 02860
401-725-1422

Municipal Central Falls Roads
City of Central Falls
Public Works Department
1280 High Street
Central Falls, RI 02863
401-727-7466

Central Falls Fire Department
Central Falls Fire Department
150 Illinois Street
Central Falls, RI 02863
401-727-7446

Telephone Service
Verizon ASC

Central Falls Police Department
Central Falls Police Department

350 Granite Street
Braintree MA 02184-3905
1-401-525-3830

160 Illinois Street
Central Falls, RI 02863
401-727-7411

Gas Services

Rhode Island Energy
1595 Mendon Road
Cumberland, RI 02864
401-272-5040

Electric Services

Rhode Island Energy
P.O. Box 960
Northborough, MA 01532-0960
1-800-909-1212

State Highways

Department of Transportation
Highway Division
State Office Building
Providence, RI 02903
401-277-2420

Cable Television Service

Cox Communications
J. P. Murphy Highway
West Warwick, RI 02893
401-821-1919

Sanitary Sewer Service

Narragansett Bay Commission
1 Service Road
Providence, RI 02905-5505
401-461-8848

ARTICLE 31. NOTICE OF SPECIAL CONDITIONS:

Attention is particularly called to those parts of the contract documents and specifications which deal with the following:

- (1) Sequence of Work.
- (2) Inspection and testing of materials.
- (3) Insurance requirements.
- (4) Interpretation of drawings and specifications.
- (5) Special requirements for work within limits of municipally-owned, privately-owned and State-owned property.
- (6) Equal employment opportunities as required by the state or municipality.
- (7) Wage Rates

ARTICLE 32. CONTRACT:

A contract in the form set forth hereinafter will be required to be executed by the successful bidder and the Owner. The attention of all bidders is, therefore, called to the form of said proposed contract and the provisions thereof.

ARTICLE 33. PRICES:

- (a) Bidders shall state the proposed price for the work by which the bids will be compared. This price is to cover all the expenses incidental to the completion of the work in full conformity with the contract, specifications and drawings. The price or prices proposed shall be stated both in writing and in figures, and any bid not so stated may be rejected.
- (b) In the event that there is a discrepancy between the unit prices and the extended totals, the unit prices shall govern. In the event that there is a discrepancy between the price written in words and written in figures, the prices written in words shall govern. No bid will be accepted which does not contain a unit or lump sum price for every item contained in the bid form.

ARTICLE 34. ITEMS NOT LISTED IN THE BID:

The lump sum and unit price items listed in the bid are intended to cover all items of work to be done and materials and work to be furnished to fully complete the work in accordance with the Contract Documents. Appurtenant items of work shown on the drawings or specified or required to complete the work but not listed separately under list of items in the bid shall be provided and shall be included in the cost of payment under the various applicable bid items of work and no separate payment will be made for such items. It shall be the responsibility of the Contractor to verify any missing or incomplete data.

ARTICLE 35. UNCERTAINTY OF QUANTITIES:

- (a) The quantities listed in the bid (proposal) are approximate and are given only for use in comparing bids and to indicate approximately the total amount of the contract, and the Owner does not expressly or by implication represent that the actual amounts of work will even approximately correspond therewith, but does call particular attention to the uncertainty in the quantities of the work involved which cannot be predicted in advance. The work under certain items may be materially greater or less than those given in the bid as may be necessary in the judgment of the Owner to complete the work contemplated in the contract. Attention is particularly called to the fact that the quantity of work to be done under some bid items may be largely dependent on subsurface ground conditions encountered and therefore the quantities of work to be done under the various items may vary substantially from the estimated quantities or may even be omitted.
- (b) Under the contract, the Owner reserves the right to increase or decrease the approximate quantities for or to omit entirely any of the items as listed in the bid.
- (c) Only such quantities of the respective items of work actually performed and accepted will be paid for. An increase or decrease in the quantity for any item shall not be regarded as grounds for an increase or decrease in the bid prices.

ARTICLE 36. MANUFACTURER'S EXPERIENCE:

Wherever it may be written that the material/equipment manufacturer must have a specified period of experience with his product, equipment which does not meet the specified experience period can be considered if the equipment supplier or manufacturer is willing to provide a bond or cash deposit for the duration of the specified time period which will guarantee replacement of that equipment in the event of failure.

ARTICLE 37. PREBID CONFERENCE:

All prospective bidders are encouraged to attend a prebid conference scheduled by the Owner prior to the opening of Bids. Any addendums, errors, and areas of concern will be addressed at the meeting.

ARTICLE 38. PRECONSTRUCTION CONFERENCE:

The selected Contractor shall be prepared to attend a preconstruction conference scheduled by the Owner after award of the contract, but prior to the actual commencement of work at the site. The main item of discussion will be the Contractor's construction schedule.

ARTICLE 39. INSURANCES:

The Contractor shall secure and maintain insurance of the type and in the amounts described in Article 30 of the General Conditions, from an insurance company authorized to write casualty insurance in the State of Rhode Island. Such insurance shall protect the Contractor, his subcontractors, and the Owner from claims for bodily injury, death or property damage which may arise from operations under this contract, including blasting. The Contractor shall not commence work under this contract until he has obtained all insurance required and filed the certificate of insurance policy with the Owner. Each insurance policy shall contain a clause providing that it shall not be cancelled or altered by the insurance company without fifteen (15) days written notice to the Owner of the intention to cancel.

ARTICLE 40. TAXES:

The Bidder's attention is directed to the fact that certain taxes, including Federal, excise and/or Rhode Island Use Taxes are not applicable to City work. The City will execute exemption certificates, prepared by the Contractor, for the materials and equipment used in the work.

ARTICLE 41. WINTER-TIME SHUTDOWN PERIOD

There shall be no work on public roadways during the period between **November 15 and April 1** (RIDOT winter shutdown dates may differ slightly). The Contractor shall restore permanent water service to all customers, remove all temporary bypass piping, building service connections and all other temporary work from the project site. The Contractor shall place temporary paving as required; restore to their original condition 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, safe and acceptable condition, at no additional expense to the Owner.



85 Branch Street
Pawtucket, RI 02860
401-729-5000
www.PWSB.org

October, 2023

Company Contact
Company
Address 1
Address 2

Re: **Pawtucket Water Supply Board**
Contract Agreement for “MR14 Water Distribution System Improvements,
Main Replacement” Bid No. 24-041, Notice of Award

Dear Sir/Madame:

The Pawtucket Water Supply Board at its regularly scheduled meeting held on **date** voted to award the above referenced contract to your company for the **MR14 Water Distribution System Improvements, Main Replacement**.

Enclosed are two copies of the contract. Please execute both copies and return promptly to this office. PWSB will then finalize the contract and provide an original to your office.

Along with the signed contract agreements, please include your Certificates of Insurance in accordance with the attached “Request for Sealed Bids”, Section 5 titled, “Insurance”, Section 7 titled, “Additional Insurance Requirements” and Section 30 of the City of Pawtucket General Terms and Conditions of Purchase titled, “Insurance”. Please note that the City of Pawtucket and the Pawtucket Water Supply Board must be named as additionally insured with regard to General Liability.

Should you require anything further or have any questions, please contact me directly at 401-729-5011.

Sincerely,
PAWTUCKET WATER SUPPLY BOARD

Stephen Soito, PE
Engineering Manager

Enclosures: Contract Agreement (2 copies)

CC: file



**State of Rhode Island
 Division of Equity, Diversity, and Inclusion (DEDI)
 Minority Business Enterprise Compliance Office
 Minority Business Enterprise Utilization Plan**

Company Name: _____

Representative's Name who administers MBE Program: _____

Street Address: _____

City, State, Zip: _____ Telephone: _____

Email: _____ Project Location: _____

Bid or Project #: _____ Date Bid Opened: _____

Description of Work: _____

Contract Value: _____ MBE % Assigned: _____

Total # of All Subcontractors/Suppliers used: _____ # of MBE Subcontractors/Suppliers used: _____

List All Subcontractors/Suppliers/Consultants/Independent Contractors – Total Dollar Amounts – Scope of Work:

| Subcontractor / Supplier | Dollar Award | Scope/Description of Work | RI Certified M/WBE Yes/No |
|---------------------------------|---------------------|----------------------------------|--------------------------------------|
| | | | |
| | | | |
| | | | |

Please note that all MBE/WBE firms must be certified by the RI MBE Compliance Office, and that MBE/WBE firms must self-perform 100% of the work with their own forces or subcontract to another RI certified MBE/WBE in order to receive participation credit. Vendors may count 60% of expenditures for materials and supplies obtained from an MBE certified as a regular dealer/supplier, and 100% of such expenditures obtained from an MBE/WBE certified as a manufacturer. For firms certified as a broker, you may receive MBE participation credit only for the fees and commissions charged for the procurement of the good and materials, but not the cost of the materials themselves.

The above referenced contract will not be released until this plan has been approved by the Director of the Department of Administration or its designee.

For assistance and advice in identifying MBE/WBE firms, please call the Minority Business Enterprise Compliance Office at (401) 574-8253. The directory of all certified MBE firms is also located at www.mbe.ri.gov.

Signature of Authorized Agent of Business: _____ Date: _____

Send Completed Form to:
Kate Constance Brody, Esq. Administrator – MBE Compliance Office
Division of Equity, Diversity, and Inclusion (DEDI)
Minority Business Enterprise Compliance Office
One Capitol Hill, 3rd Floor
Providence, RI 02908
Phone: (401) 574-8670
Kate.Brody@doa.ri.gov

Good Faith Efforts

What is the Purpose of the Good Faith Efforts?

The Good Faith Efforts are methods employed by all EPA financial assistance agreement recipients to ensure that disadvantaged business enterprises (DBEs) have the opportunity to compete for procurements funded by EPA financial assistance funds.

What Are the Good Faith Efforts?

- ❖ Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and local government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
- ❖ Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
- ❖ Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and local Government recipients, this will include dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
- ❖ Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
- ❖ Use the services and assistance of the SBA and the Minority Business Development Agency of the Department of Commerce.
- ❖ If the prime contractor awards subcontracts, require the prime contractor to take the steps in paragraphs (a) through (e) of this section.

What are the New Contract Administration Provisions?

When the DBE rule goes into effect, there are a number of new provisions designed to prevent unfair practices that adversely affect DBEs. Those provisions are as follows:

- ❖ A recipient must require its prime contractor to pay its subcontractor for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the recipient.
- ❖ A recipient must be notified in writing by its prime contractor prior to any

termination of a DBE subcontractor for convenience by the prime contractor.

- ❖ If a DBE subcontractor fails to complete work under the subcontract for any reason, the recipient must require the prime contractor to employ the Six Good Faith Efforts if soliciting a replacement subcontractor.
- ❖ A recipient must require its prime contractor to employ the Six Good Faith Efforts even if the prime contractor has achieved its fair share objectives.

What are the New Forms Associated With the New Contract Administration Provisions?

EPA Form 6100-2 - DBE Program Subcontractor Participation Form. This form gives a DBE subcontractor the opportunity to describe the work the DBE subcontractor received from the prime contractor, how much the DBE subcontractor was paid and any other concerns the DBE subcontractor might have.

EPA Form 6100-3 - DBE Program Subcontractor Performance Form. This form captures an intended subcontractor's description of work to be performed for the prime contractor and the price of the work submitted to the prime.

EPA Form 6100-4 – DBE Program Subcontractor Utilization Form. This form captures the prime's intended use of an identified DBE subcontractor, and the estimated dollar amount of the subcontract.

| Form | Requirement | Provided By | Completed By | Submitted To |
|-----------------|--|--------------------|---------------------|---|
| EPA Form 6100-2 | Recipients required to have prime contractors provide form to Subcontractors | Prime Contractors | DBE Subcontractors | EPA DBE Coordinator |
| EPA Form 6100-3 | Recipients required to have prime contractors provide form to Subcontractors | Prime Contractors | DBE Subcontractors | Recipients as part of bid or proposal package |
| EPA Form 6100-4 | Recipients required to have prime contractors complete the form | Recipients | Prime Contractors | Recipients as part of bid or proposal package |

**Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Participation Form**

An EPA Financial Assistance Agreement Recipient must require its prime contractors to provide this form to its DBE subcontractors. This form gives a DBE¹ subcontractor² the opportunity to describe work received and/or report any concerns regarding the EPA-funded project (e.g., in areas such as termination by prime contractor, late payments, etc.). The DBE subcontractor can, as an option, complete and submit this form to the EPA DBE Coordinator at any time during the project period of performance.

| | | | |
|-----------------------|--|-------------------------|--|
| Subcontractor Name | | Project Name | |
| Bid/ Proposal No. | Assistance Agreement ID No. (if known) | Point of Contact | |
| Address | | | |
| Telephone No. | | Email Address | |
| Prime Contractor Name | | Issuing/Funding Entity: | |

| Contract Item Number | Description of Work Received from the Prime Contractor Involving Construction, Services, Equipment or Supplies | Amount Received by Prime Contractor |
|----------------------|--|-------------------------------------|
| | | |

¹ A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

² Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

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

This form is intended to capture the DBE¹ subcontractor's² description of work to be performed and the price of the work submitted to the prime contractor. An EPA Financial Assistance Agreement Recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractors bid or proposal package.

| | | | |
|-----------------------|--|-------------------------|--|
| Subcontractor Name | | Project Name | |
| Bid/ Proposal No. | Assistance Agreement ID No. (if known) | Point of Contact | |
| Address | | | |
| Telephone No. | | Email Address | |
| Prime Contractor Name | | Issuing/Funding Entity: | |

| Contract Item Number | Description of Work Submitted to the Prime Contractor Involving Construction, Services, Equipment or Supplies | Price of Work Submitted to the Prime Contractor |
|--|---|--|
| | | |
| DBE Certified By: <input type="checkbox"/> DOT <input type="checkbox"/> SBA <input type="checkbox"/> Other: _____ | | Meets/ exceeds EPA certification standards? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown |

¹ A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

² Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

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

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

| | |
|-----------------------------------|-------------------|
| Prime Contractor Signature | Print Name |
| | |
| Title | Date |
| | |

| | |
|--------------------------------|-------------------|
| Subcontractor Signature | Print Name |
| | |
| Title | Date |
| | |

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

**Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Utilization Form**

This form is intended to capture the prime contractor's actual and/or anticipated use of identified certified DBE¹ subcontractors² and the estimated dollar amount of each subcontract. An EPA Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

| | | | |
|-------------------------|--|------------------|--|
| Prime Contractor Name | | Project Name | |
| Bid/ Proposal No. | Assistance Agreement ID No. (if known) | Point of Contact | |
| Address | | | |
| Telephone No. | | Email Address | |
| Issuing/Funding Entity: | | | |

| | | | |
|---|--------------------------------------|------------------------|---------------------------------|
| I have identified potential DBE certified subcontractors | __ YES | __ NO | |
| If yes, please complete the table below. If no, please explain: | | | |
| | | | |
| Subcontractor Name/ Company Name | Company Address/ Phone/ Email | Est. Dollar Amt | Currently DBE Certified? |
| | | | |
| | | | |
| | | | |

Continue on back if needed

¹ A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

² Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

**Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Utilization Form**

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

| Prime Contractor Signature | Print Name |
|-----------------------------------|-------------------|
| | |
| Title | Date |
| | |

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

**Office of Diversity, Equity and Opportunity (ODEO)
 MBE Compliance Office
 1 Capitol Hill, 3rd Floor
 Providence, RI 02908**

(401) 574-8670
www.mbe.ri.gov

Pursuant to RIGL 37-14.1 as well as the regulations promulgated thereto, the MBE Compliance Office requires that you complete the following table. Please note that these figures will be verified with the MBEs identified. If there are outstanding issues, such as retainage or a dispute, please indicate and attach supporting documentation for same. Also note that copies of invoice and cancelled checks for payment to all MBE subcontractors and suppliers are required.

Contractor/Vendor Name: _____ **Current Prime Contract Amount:** \$ _____ **% Complete:** _____
Project Name & Location: _____

| MBE/WBE Subcontractor | Original Contract Amount | Change Orders | Revised Contract Value | % Completed To Date | Amount Paid To Date | Amount Due | Retainage % | Retainage Amount | Explanation |
|-----------------------|--------------------------|---------------|------------------------|---------------------|---------------------|------------|-------------|------------------|-------------|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

I declare, under penalty of perjury, that the information provided in this verification form and supporting documents is true and correct.

 Signature Date

 Printed Name
 Notary Certificate:

Sworn before me this _____ day of _____, 20_____.

 Notary Signature Commission Expires

DEBARMENT & SUSPENSION

Executive Order 12549--Debarment and Suspension

Source: The provisions of Executive Order 12549 of Feb. 18, 1986, appear at 51 FR 6370, 3 CFR, 1986 Comp., p. 189, unless otherwise noted.

By the authority vested in me as President by the Constitution and laws of the United States of America, and in order to curb fraud, waste, and abuse in Federal programs, increase agency accountability, and ensure consistency among agency regulations concerning debarment and suspension of participants in Federal programs, it is hereby ordered that:

Section 1. (a) To the extent permitted by law and subject to the limitations in Section 1(c), Executive departments and agencies shall participate in a system for debarment and suspension from programs and activities involving Federal financial and nonfinancial assistance and benefits. Debarment or suspension of a participant in a program by one agency shall have government-wide effect.

(b) Activities covered by this Order include but are not limited to: grants, cooperative agreements, contracts of assistance, loans, and loan guarantees.

(c) This Order does not cover procurement programs and activities, direct Federal statutory entitlements or mandatory awards, direct awards to foreign governments or public international organizations, benefits to an individual as a personal entitlement, or Federal employment.

Sec. 2. To the extent permitted by law, Executive departments and agencies shall:

(a) Follow government-wide criteria and government-wide minimum due process procedures when they act to debar or suspend participants in affected programs.

(b) Send to the agency designated pursuant to Section 5 identifying information concerning debarred and suspended participants in affected programs, participants who have agreed to exclusion from participation, and participants declared ineligible under applicable law, including Executive Orders. This information shall be included in the list to be maintained pursuant to Section 5.

(c) Not allow a party to participate in any affected program if any Executive department or agency has debarred, suspended, or otherwise excluded (to the extent specified in the exclusion agreement) that party from participation in an affected program. An agency may grant an exception permitting a debarred, suspended, or excluded party to participate in a particular transaction upon a written determination by the agency head or authorized designee stating the reason(s) for deviating from this Presidential policy. However, I intend that exceptions to this policy should be granted only infrequently.

Sec. 3. Executive departments and agencies shall issue regulations governing their implementation of this Order that shall be consistent with the guidelines issued under Section 6. Proposed regulations shall be submitted to the Office of Management and Budget for review within four months of the date of the guidelines issued under Section 6. The Director of the Office of Management and Budget may return for reconsideration proposed regulations that the Director believes are inconsistent with the guidelines. Final regulations shall be published within twelve months of the date of the guidelines.

Sec. 4. There is hereby constituted the Interagency Committee on Debarment and Suspension, which shall monitor implementation of this Order. The Committee shall consist of representatives of agencies designated by the Director of the Office of Management and Budget.

Sec. 5. The Director of the Office of Management and Budget shall designate a Federal agency to perform the following functions: maintain a current list of all individuals and organizations excluded from program participation under this Order, periodically distribute the list to Federal agencies, and study the feasibility of automating the list; coordinate with the lead agency responsible for government-wide debarment and suspension of contractors; chair the Interagency Committee established by Section 4; and report periodically to the Director on implementation of this Order, with the first report due within two years of the date of the Order.

Sec. 6. The Director of the Office of Management and Budget is authorized to issue guidelines to Executive departments and agencies that govern which programs and activities are covered by this Order, prescribe government-wide criteria and government-wide minimum due process procedures, and set forth other related details for the effective administration of the guidelines.

Sec. 7. The Director of the Office of Management and Budget shall report to the President within three years of the date of this Order on Federal agency compliance with the Order, including the number of exceptions made under Section 2(c), and shall make recommendations as are appropriate further to curb fraud, waste, and abuse.

Implementation in the SRF Programs

A company or individual who is debarred or suspended cannot participate in primary and lower-tiered covered transactions. These transactions include SRF loans and contracts and subcontracts awarded with SRF loan funds.

Under 40 C.F.R. 32.510, the SRF agency must submit a certification stating that it shall not knowingly enter into any transaction with a person who is proposed for debarment, suspended, declared ineligible, or voluntarily excluded from participation in the SRF program. This certification is reviewed by the EPA regional office before the capitalization grant is awarded.

A recipient of SRF assistance directly made available by capitalization grants must provide a certification that it will not knowingly enter into a contract with anyone who is ineligible under the regulations to participate in the project. Contractors on the project have to provide a similar certification prior to the award of a contract and subcontractors on the project have to provide the general contractor with the certification prior to the award of any subcontract.

In addition to actions taken under 40 C.F.R. Part 32, there are a wide range of other sanctions that can render a party ineligible to participate in the SRF program. Lists of debarred, suspended and otherwise ineligible parties are maintained by the General Services Administration and should be checked by the SRF agency and all recipients of funds directly made available by capitalization grants to ensure the accuracy of certifications.

Additional References

C 40 C.F.R. Part 32: EPA Regulations on Debarment and Suspension.

**CERTIFICATION REGARDING DEBARMENT & SUSPENSION
AND OTHER RESPONSIBILITY MATTERS**

In accordance with the Executive Order 12549, the prospective primary participant certifies to the best of his / her knowledge and belief, that its principals:

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

Name and Title of Authorized Agent

Date

Signature of Authorized Agent

Company Name

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

RELEVANT FEDERAL AND STATE LAWS



Rhode Island Department of Health Center for Drinking Water Quality

Drinking Water State Revolving Fund Program Relevant Federal and State Laws

A. Federal

- 1) Equal Employment Opportunity and Affirmative Action (Executive Order 11246)
 - i) OFCCP fact sheet.
 - ii) Equal Opportunity Clause and the Standard Federal Equal Employment Specifications.
 - iii) Notice of Non-Discrimination in Employment.
- 2) Non-discrimination in employment notice.
- 3) Assurance of compliance with Title VI of the Civil Rights Act of 1964 and Section 13 of the FWPCA Amendments of 1972 (EPA form 4700-1).
- 4) Affirmative steps for soliciting MBE/WBE (40 CFR 31.36(e))

Applicable cross-cutting Federal authorities for projects funded through SRF programs are made available at http://water.epa.gov/grants_funding/dwsrf/xcuts.cfm. Additional information is provided in the United States Environmental Protection Agency's cross-cutting handbook available at <https://www.epa.gov/sites/production/files/2015-08/documents/crosscutterhandbook.pdf>.

B. State of Rhode Island

- 1) RIGL 37-2.1, Domestic Steel
- 2) RIGL 37-12, Contractors Bonds
- 3) RIGL 37-12.1, Substitution of Security for Retained Earnings of Architects and Engineers.
- 4) RIGL 37-13, Labor and Payment of Debts by Contractors
 - i) Prevailing Wage Rates
- 5) RIGL 37-14.1, Minority Business Enterprise
 - i) Regulations Governing Participation by Minority Business Enterprises in State Funded and Directed Public Construction Projects, Construction Contracts and Procurement Contracts Goods and Services.
- 6) RIGL 37-16, Public Works Arbitration
- 7) RIGL 45-55, Award of Municipal Contracts

NOTE: This package is prepared by DOH as a service of the DWSRF program. While every attempt at accuracy has been made, these are not certified true copies of the laws presented. **The responsibility for compliance with all applicable provisions of Federal and State laws and regulations relating to the bidding, award, and performance of contracts is the applicant's and the bidder's.** Certified true and complete copies of any Rhode Island laws and regulations may be obtained from the Office of the Secretary of State.

Employment Standards Administration Office of Federal Contract Compliance Programs

Fact Sheet EXECUTIVE ORDER 11246

EEO and Affirmative Action Guidelines for Federal Contractors Regarding Race, Color, Gender, Religion, and National Origin.

BASIC PROVISIONS

Since 1965, the U.S. Department of Labor's Office of Federal Contract Compliance Programs (OFCCP) has been committed to ensuring that Government contractors comply with the equal employment opportunity (EEO) and the affirmative action provisions of their contracts.

OFCCP administers and enforces Executive Order 11246, as amended, which prohibits federal contractors and federally-assisted construction contractors and subcontractors, who do over \$10,000 in Government business in one year from discriminating in employment decisions on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin.

The Executive Order also requires Government contractors to take affirmative action to insure that equal opportunity is provided in all aspects of their employment.

AFFIRMATIVE ACTION REQUIREMENTS

Each Government contractor with 50 or more employees and \$50,000 or more in government contracts is required to develop a written affirmative action program (AAP) for each of its establishments.

A written affirmative action program helps the contractor identify and analyze potential problems in the participation and utilization of women and minorities in the contractor's workforce.

If there are problems, the contractor will specify in its AAP the specific procedures it will follow and the good faith efforts it will make to provide equal employment opportunity.

Expanded efforts in outreach, recruitment, training and other areas are some of the affirmative steps contractors can take to help members of the protected groups compete for jobs on equal footing with other applicants and employees.

Affirmative action is not preferential treatment. It does not mean that unqualified persons should be hired or promoted over other people. What affirmative action does mean is that positive steps must be taken to ensure equal employment opportunity for traditionally disadvantaged groups.

ENFORCEMENT AND COMPLIANCE

Compliance Reviews

OFCCP conducts compliance reviews to investigate the employment practices of Government contractors. During a compliance review, a compliance officer examines the contractor's affirmative action program; checks personnel, payroll, and other employment records; interviews employees and company officials; and investigates virtually all aspects of employment in the company.

The investigator also checks to see whether the contractor is making special efforts to achieve equal opportunity through affirmative action. If problems are discovered, OFCCP will recommend corrective action and suggest ways to achieve equal employment opportunity.

Complaint Investigations

Individuals may file complaints if they believe they have been discriminated against by federal contractors or subcontractors. Complaints also may be filed by organizations on behalf of the person or persons affected.

Complaints must be filed within 180 days from the date of the alleged discrimination, although filing time can be extended for a good reason.

If a complaint filed under Executive Order 11246 involves discrimination against only one person, OFCCP will normally refer it to the EEOC. Cases involving groups of people or indicating patterns of discrimination are generally investigated and resolved by OFCCP. Complaints may be filed directly with any of OFCCP's regional or district offices throughout the country, or with OFCCP in Washington, D.C.

Compliance Assistance

To help contractors understand their contractual obligations for EEO and affirmative action, OFCCP provides technical assistance. District office staff offers guidance to contractors on how to develop an affirmative program through company seminars, training programs held in conjunction with industry liaison groups, and one-on-one consultations on affirmative action practices and procedures.

Enforcing Contract Compliance

When a compliance review discloses problems, OFCCP attempts to work with the contractor, often entering into a conciliation agreement. A conciliation agreement may include back pay, job offers, seniority credit, promotions or other forms of relief for victims of discrimination. It may also involve new training programs, special recruitment efforts, or other affirmative action measures.

When conciliation efforts are unsuccessful, OFCCP refers the case to the Office of the Solicitor for enforcement through administrative enforcement proceedings. A contractor cited for violating EEO and affirmative action requirements may have a formal hearing before an administrative law judge.

If conciliation is not reached before or after the hearing, sanctions may be imposed. For example, a contractor could lose its government contracts or subcontracts or be debarred, i.e., declared ineligible for any future government contracts.

Further Information

For more information about contract compliance, filing complaints, or compliance assistance, contact any of OFCCP's regional or district offices. All offices are listed in telephone directories under U.S. Department of Labor, Employment Standards Administration, Office of Federal Contract Compliance Programs.

EQUAL EMPLOYMENT OPPORTUNITY AND AFFIRMATIVE ACTION

Executive Order 11246

(Excerpts from 41 CFR 60 Parts 1 and 4)

41 CFR 60-1.4 - Equal opportunity clause

(b) Federally assisted construction contracts. Except as otherwise provided, each administering agency shall require the inclusion of the following language as a condition of any grant, contract, loan, insurance, or guarantee involving federally assisted construction which is not exempt from the requirements of the equal opportunity clause:

The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following *equal opportunity clause*:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause. Such action shall include but not be limited to the following:
- (2) Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will

permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- (7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, that if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

(c) *Subcontracts.* Each nonexempt prime contractor or subcontractor shall include the equal opportunity clause in each of its nonexempt subcontracts.

(d) *Incorporation of the equal opportunity clause by reference.* The equal opportunity clause may be incorporated by reference in all Government contracts and subcontracts, including Government bills of lading, transportation requests, contracts for deposit of Government funds, and contracts for issuing and paying U.S. savings bonds and notes, and such other contracts and subcontracts as the Director may designate.

(e) *Incorporation by operation of the order.* By operation of the order, the equal opportunity clause shall be considered to be a part of every contract and subcontract required by the order and the regulations in this part to include such a clause whether or not it is physically incorporated in such contracts and whether or not the contract between the agency and the contractor is written.

(f) Adaptation of language. Such necessary changes in language may be made in the equal opportunity clause as shall be appropriate to identify properly the parties and their undertakings.

41 CFR 60-4.3 - Equal opportunity clauses

(a) The equal opportunity clause published at 41 CFR 60-1.4(a) of this chapter is required to be included in, and is part of, all nonexempt Federal contracts and subcontracts, including construction contracts and subcontracts. The equal opportunity clause published at 41 CFR 60-1.4(b) is required to be included in, and is a part of, all nonexempt federally assisted construction contracts and subcontracts. In addition to the clauses described above, all Federal contracting officers, all applicants and all non-construction contractors, as applicable, shall include the specifications set forth in this section in all Federal and federally assisted construction contracts in excess of \$10,000 to be performed in geographical areas designated by the Director pursuant to 60-4.6 of this part and in construction subcontracts in excess of \$10,000 necessary in whole or in part to the performance of non-construction Federal contracts and subcontracts covered under the Executive order.

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

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 - i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations

- serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to

comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

(b) The notice set forth in 41 CFR 60-4.2 and the specifications set forth in 41 CFR 60-4.3 replace the New Form for Federal Equal Employment Opportunity Bid Conditions for Federal and Federally Assisted Construction published at 41 FR 32482 and commonly known as the Model Federal EEO Bid Conditions, and the New Form shall not be used after the regulations in 41 CFR Part 60-4 become effective.

[43 FR 49254, Oct. 20, 1978; 43 FR 51401, Nov. 3, 1978, as amended at 45 FR 65978, Oct. 3, 1980]

NOTICE TO LABOR UNIONS OR OTHER ORGANIZATIONS OF WORKERS

NON-DISCRIMINATION IN EMPLOYMENT

TO: _____
(Name of Union or Organization of Workers)

The undersigned currently holds contract(s) with _____
(Name of Applicant)

involving funds or credit of the U.S. Government of (a) subcontract(s) with a prime contractor holding such contract(s).

You are advised that under the provisions of the above contract(s) or subcontract(s) and in accordance with Executive Order 11246, dated September 24, 1965, the undersigned is obliged not to discriminate against any employee or applicant for employment because of race, age, handicap, veteran status, color, creed, or national origin. This obligation not to discriminate in employment includes, but is not limited to, the following:

**HIRING, PLACEMENT, UPGRADING, TRANSFER, OR DEMOTION,
RECRUITMENT, ADVERTISING, OR SOLICITATION FOR
EMPLOYMENT TRAINING DURING EMPLOYMENT, RATES OF PAY
OR OTHER FORMS OF COMPENSATION, SELECTION FOR TRAINING
INCLUDING APPRENTICESHIP, LAYOFF, OR TERMINATION.**

This notice is furnished you pursuant to the provisions of the above contract(s) or subcontract(s) and Executive Order 11246.

COPIES OF THIS NOTICE WILL BE POSTED BY THE UNDERSIGNED IN CONSPICUOUS PLACES AVAILABLE TO EMPLOYEES OR APPLICANTS FOR EMPLOYMENT.

(Contractor or Subcontractor)

(Date)

**UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY**

**ASSURANCE OF COMPLIANCE
FOR
TITLE VI OF THE CIVIL RIGHTS ACT OF 1964
AND
SECTION 13 OF THE FWPCA AMENDMENTS OF 1972**

| | | |
|---|---|------------------------------|
| NAME AND ADDRESS OF APPLICANT/RECIPIENT (<i>Hereinafter called ASSUROR</i>) | GRANT IDENTIFICATION NUMBER <i>(To be completed by EPA)</i> | GRANT AMOUNT REQUESTED \$ |
| | TYPE OF GRANT <input type="checkbox"/> DEMONSTRATION <input type="checkbox"/> RESEARCH <input type="checkbox"/> TRAINING <input type="checkbox"/> OTHER (<i>Specify</i>): | |
| | CHECK ONE: <input type="checkbox"/> NEW <input type="checkbox"/> CONTINUATION | |

HEREBY AGREES THAT IT will comply with Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and all requirements of the U.S. Environmental Protection Agency (*hereinafter called "EPA"*) issued pursuant to that title, to the end that in accordance with Title VI of that Act, no person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Assuror receives financial assistance from EPA and hereby gives assurance that it will now and hereafter take all necessary measures to effectuate this agreement.

HEREBY AGREES THAT IT will comply with all applicable requirements of Section 13 of the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500) and all requirements of EPA issued pursuant to that section, to the end that in accordance with that section of that Act, no person in the United States shall, on the ground of sex be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity under the said Federal Water Pollution Control Act Amendments for which the Assuror receives assistance from EPA and hereby gives assurance that it will now and hereafter take all necessary measures to effectuate this agreement.

If any real property or structure thereon is provided or improved with the aid of financial assistance extended to the Assuror by EPA, this Assurance obligates the Assuror, or, in the case of any transfer of such property, any transferee for the period during which the real property or structure is used for a purpose involving the provisions of similar services or benefits. If any personal property is so provided, this Assurance obligates the Assuror for the period during which it retains ownership or possession of the property. In all other cases, this Assurance obligates the Assuror for the period during which the financial assistance is extended to it by EPA.

THE ASSURANCE is given in consideration of and for the purpose of obtained any and all Federal grants, loans, contracts, property discounts or other financial assistance extended after the date hereof to the Assuror by EPA including installment payments after such date on account of arrangements for Federal financial assistance which were approved before such date. The Assuror recognizes and agrees that such Federal financial assistance will be extended in reliance on the representations and agreements made in this Assurance and that the United States shall reserve the right to seek judicial enforcement of this Assurance. The Assurance is binding on the Assuror, its successors, transferees, and assignees, and the person or persons whose signature appear below are authorized to sign this Assurance on behalf of the Assuror.

The obligations assumed by the Assuror hereunder are in addition to any obligations which may be imposed to the Assuror by any applicable regulation now outstanding or which may hereafter be adopted by EPA to effectuate any provision or goal of the said Title VI and all applicable requirements of the said Section 13, and no part of this Assurance shall be read so as to in any way detract from or modify any obligation which may be imposed on the Assuror by any such regulation standing alone.

| | |
|--|------|
| SIGNATURE OF ASSUROR BY PRESIDENT, CHAIRMAN OF BOARD OR COMPARABLE AUTHORIZED OFFICIAL | DATE |
|--|------|

CONTRACTING WITH SMALL AND MINORITY FIRMS, WOMEN'S BUSINESS ENTERPRISE

40 CFR 31.36(e)

40 CFR 31.36(e) – Contracting with small and minority firms, women's business enterprise and labor surplus area firms.

(1) The grantee and sub-grantee will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.

(2) Affirmative steps shall include:

- (i) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- (ii) Assuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;
- (iii) Dividing the total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- (iv) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
- (v) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and
- (vi) Requiring the prime contractor, if subcontracts are to be let, to take affirmative steps listed in paragraphs (e)(2)(i) through (v) of this section.

TITLE 37

CHAPTER 2.1 DOMESTIC STEEL

Section

| | |
|-----------|--------------------------------------|
| 37-2.1-1. | Short Title |
| 37-2.1-2. | Purpose |
| 37-2.1-3. | Purchase of steel and steel products |
| 37-2.1-4. | Payment |
| 37-2.1-5. | Definitions |

37-2.1-1. Short title.

This chapter shall be known and may be cited as the "Steel Products Procurement Act".

37-2.1-2. Purpose.

- (a) This chapter shall be deemed to be an exercise of the police powers of the state for the protection of the health, safety, and general welfare of the people of the state.
- (b) It is hereby determined by the general assembly of Rhode Island and declared as a matter of legislative findings that:
 - (1) The United States is one of the leading countries in the production and use of steel and its allied products;
 - (2) The use of steel products constitutes a major industry of the United States and, as such, provides the jobs and family incomes of millions of persons in the United States;
 - (3) The taxes paid to Rhode Island and the United States by employers and employees engaged in the production and sale of steel products are one of the largest single sources of public revenues in this country;
 - (4) It has, for many years, been the policy of the state to aid and support the development and expansion of industry in the United States in order to foster the economic well-being of the state and its people; and
 - (5) The economy, general welfare, and national security of the United States, are inseparably related to the preservation and development of the steel industry in the United States.
- (c) The general assembly therefore declares it to be the policy of the state that all public officers and agencies should, at all times, aid and promote the development of the steel industry of the United States in order to stimulate and improve the economic well-being of the state and its people.

37-2.1-3. Purchase of steel and steel products.

- (a) Every public agency shall require that every contract document for the construction, reconstruction, alteration, repair, improvement, or maintenance of public works contain a provision that, if any steel products are to be used or supplied in the performance of the contract, only steel products as herein defined shall be used or supplied in the performance of the contract or any subcontracts thereunder.
- (b) This section shall not apply in any case where the head of the public agency, in writing, determines that steel products as herein defined are not produced in, or readily available in the United States or that such steel products shall not exceed fifteen percent (15%) of the costs of any other steel products obtainable nationally or internationally.

37-2.1-4. Payment.

No public agency shall authorize, provide for, or make any payments to any person under any contract containing the provision required by 37-2.1-3 unless the public agency is satisfied that such person has fully complied with that provision. Any such payments made to any person by any public agency which should not have been made, as a result of this section, shall be recoverable directly from the contractor or subcontractor who did not comply with 37-2.1-3 by either such public agency or the attorney general upon suit filed in the court of any county.

37-2.1-5. Definitions.

The following words and phrases when used in this chapter shall have, unless the context clearly indicates otherwise, the meanings given to them in this section:

- (a) "Person" means natural persons as well as corporations, partnerships, business units, and associations;
- (b) "Public agency" means (1) the state and its departments, boards, commissions and agencies, (2) cities, towns, school districts, and any other governmental unit or district, (3) any and all other public bodies, authorities, officers, agencies, or instrumentalities, whether exercising a governmental or proprietary function;
- (c) "Public works" means steel to construct, frame or reinforce any public structure, building, highway, waterway, street, bridge, transit system, airport, or other betterment, work or improvement, whether of a permanent or temporary nature, and whether for governmental or proprietary use;
- (d) "Steel products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated, or otherwise similarly processed, or processed by a combination of two or more of such operations, from steel made in the United States by the open hearth, basic oxygen, electric furnace, Bessemer, or other steel making process;
- (e) "United States" means the United States of America and includes all territory, continental or insular, subject to the jurisdiction of the United States.

TITLE 37

CHAPTER 12 CONTRACTORS' BONDS

Sections

- 37-12-1. Contractors required to give bond – Terms and conditions.
- 37-12-2. Rights of persons furnishing labor and materials.
- 37-12-3. Remedies of creditors and state – Priority of claims.
- 37-12-4. Intervention by creditor in suit brought by state.
- 37-12-5. Time limitation on creditors' actions.
- 37-12-6. Intervention in suit brought by creditor – Consolidation of suits.
- 37-12-7. Notice of Pendency of Suit
- 37-12-8. Certified copies of documents.
- 37-12-9. Payment into court by surety – Discharge.
- 37-12-10. Retainers relating to contracts for public works or sewer or water main construction.
- 37-12-11. Substitution of securities for retained earnings.

§ 37-12-1. Contractors required to give bond – Terms and conditions. – Every person (which word for the purposes of this chapter shall include a co-partnership, a number of persons engaged in a joint enterprise, or a corporation), before being awarded a contract by the department of transportation or by the department of administration, as the case may be, and every person awarded such a contract as a general contractor or construction or project manager for the construction, improvement, completion, or repair of any public road or portion thereof or of any bridge in which the contract price shall be in excess of fifty thousand dollars (\$ 50,000), or for a contract for the construction, improvement, completion, or repair of any public building, or portion thereof, shall be required to furnish to the respective department a bond of that person to the state, with good and sufficient surety or sureties (hereafter in this chapter referred to as surety), acceptable to the respective department, in a sum not less than fifty percent (50%) and not more than one hundred percent (100%) of the contract price, conditioned that the contractor, principal in the bond, the person's executors, administrators, or successors, shall in all things, well and truly keep and perform the covenants, conditions, and agreements in the contract, and in any alterations thereof made as therein provided, on the person's part to be kept and performed, at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the state, the respective department, and all of its officers, agents, and employees, as therein stipulated, and shall also promptly pay for all such labor performed or furnished and for all such materials and equipment furnished, (which as to equipment shall mean payment of the reasonable rental value, as determined by the respective department, of its use during the period of its use), as shall be used in the carrying on of the work covered by the contract, or shall see that they are promptly paid for, whether or not the labor is directly performed for or furnished to the contractor or is even directly performed upon the work covered by the contract, and whether or not the materials are furnished to the contractor or become component parts of the work, and whether or not the equipment is furnished to the contractor or even directly used upon the work. The bond shall contain the provisions that it is subject to all such rights and powers of the respective department and such other provisions as are set forth in the contract and the plans, specifications, and proposal incorporated by reference in the contract, and that no extension of the time of performance of the contract or delay in the completion of the work thereunder or any alterations thereof, made as therein provided, shall invalidate the bond or release the liability of the surety thereunder. Waiver of the bonding requirements of this section is expressly prohibited.

37-12-2. Rights of persons furnishing labor and materials.

Every person who shall have performed labor and every person who shall have furnished or supplied labor, material, or equipment in the prosecution of the work provided for in the contract, in respect of which a payment bond is furnished under § 37-12-1, and who has not been paid in full therefor before the expiration of a period of ninety (90) days after the day on which the last of the labor was performed or furnished by him or her, or material or equipment furnished or supplied by him or her for which a claim is made, shall have the right to sue on the payment bond for the amount, or the balance thereof, unpaid at the time of institution of the suit and to prosecute the action to final execution and judgment for the sum or sums justly due him or her; provided, however, that any person having direct contractual relationship with a subcontractor but no contractual relationship express or implied with the contractor

furnishing the payment bond shall have a right of action upon the payment bond upon giving written notice to the contractor within ninety (90) days from the date on which the person furnished or performed the last of the labor, or furnished or supplied the last of the material or equipment for which the claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the labor was furnished or performed or the material or equipment was furnished or supplied. The notice shall be served by mailing the same by certified mail, postage prepaid, in an envelope addressed to the contractor at any place he or she maintains an office, conducts his or her business, or his or her residence.

37-12-3. Remedies of creditors and state - Priority of claims.

The remedy on the bond shall be by a civil action brought in the superior court for the counties of Providence and Bristol and in any suit brought on the bond the rights of the state shall be prior to those of all creditors. The rights of persons who shall have performed labor as aforesaid shall be prior to the rights of all other creditors, and there shall be no priorities among laborers or among other creditors under the bond. The state, either after having recovered a judgment against the contractor on the contract or without having recovered a judgment, may bring a suit on the bond against the contractor and surety on the bond, and may join as parties defendant in the suit any persons claiming to have rights under the bond as creditors; and, if it has not brought such a suit, it may at any time before a final and conclusive decree, intervene and become a party in any suit brought, as hereafter provided in this chapter, by any person claiming to be a creditor under the bond.

37-12-4. Intervention by creditor in suit brought by state.

Any person claiming to be a creditor under the bond may at any time intervene and become a party in any pending suit brought as aforesaid by the state on the bond, and by so intervening may have the rights to the person adjudicated in the suit.

37-12-5. Time limitation on creditors' actions.

No suit instituted under § 37-12-2 shall be commenced after the expiration of two (2) years, or under the maximum time limit as contained within any labor or material payment bond required under § 37-12-1, whichever period is longer, after the day on which the last of the labor was furnished or performed or material or equipment was furnished or supplied by any person claiming under the section.

37-12-6. Intervention in suit brought by creditor - Consolidation of suits.

When a suit has been so brought on the bond by a person claiming to be a creditor under the bond and is pending, any other person claiming to be a creditor under the bond may intervene and become a party in the first suit thus brought and pending and by so intervening may have the rights of the other person adjudicated in the suit. If two (2) or more of the suits be filed in the court on the same day, the one in which the larger sum shall be claimed shall be regarded as the earlier suit. All suits brought upon the bond as provided in this chapter shall be consolidated together by the court and heard as one suit.

37-12-7. Notice of pendency of suit.

In any suit brought under the provisions of this chapter such personal notice of the pendency of the suit as the court may order shall be given to all such known creditors and persons claiming to be creditors under the bond as shall not have entered their appearances in the suit and, in addition to the notice, notice of the pendency of the suit shall be given by publication in some newspaper published in this state of general circulation in the city or town or every city or town in which the work covered by the contract was carried on, once a week for three (3) successive weeks, in such form as the court may order. The court, however, may dispense with the notices if satisfied that sufficient notices shall have been given in some other suit brought under the provisions of this chapter.

37-12-8. Certified copies of documents.

Any person claiming to be a creditor under the bond and having filed a claim with the respective department, in accordance with the requirements of § 37-12-2, shall have the right, at any time when the person could under this chapter file a suit or intervene in a pending suit, to require the respective department to furnish to the person certified copies of the contract, proposal, plans specifications, and bond.

37-12-9. Payment into court by surety - Discharge.

The surety on the bond may pay into the registry of the court, for distribution among those who may be or become entitled thereto under the decree of the court, the penal sum named in the bond less any amount which the surety

may have paid to the state in satisfaction of the liability of the surety to the state under the bond, and then shall be entitled to be discharged from all further liability under the bond.

37-12-10. Retainers relating to contracts for public works or sewer or water main construction.

(a) Upon substantial completion of the work required by a contract aggregating in amount less than five hundred thousand dollars (\$ 500,000) with any municipality, or any agency or political subdivision thereof, for the construction, reconstruction, alteration, remodeling, repair, or improvement of sewers and water mains, or any public works project defined in, the awarding authority may deduct from its payment a retention to secure satisfactory performance of the contractual work not exceeding five percent (5%) of the contract price unless otherwise agreed to by the parties. Upon substantial completion of the work required by a contract aggregating in an amount of five hundred thousand dollars (\$ 500,000) or greater with any municipality, or any agency or political subdivision thereof, for the construction, reconstruction, alteration, remodeling, repair, or improvement of sewers and water mains, or any public works project defined in § 37-13-1, the awarding authority may deduct from its payment a retention to secure satisfactory performance of the contractual work not exceeding five percent (5%) of the contract price. In the case of periodic payments with respect to contracts less than the aggregate amount of five hundred thousand dollars (\$ 500,000), the awarding authority may deduct from its payment a retention to secure satisfactory performance of the contractual work not exceeding five percent (5%) of the approved amount of any periodic payment unless otherwise agreed to by the parties. In the case of periodic payments with respect to contracts in the aggregate amount of five hundred thousand dollars (\$ 500,000) or greater, the awarding authority may deduct from its payment a retention to secure satisfactory performance of the contractual work not exceeding five percent (5%) of the approved amount of any periodic payment.

(b) The retainage shall be paid to any contractor or subcontractor within ninety (90) days of the date the work is accepted by the awarding authority unless a dispute exists with respect to the work. If payment is not made within ninety (90) days for any reason other than a dispute, which, if resolved and it is not the fault of the contractor, interest shall be assessed at the rate of ten percent (10%) per annum on all money which is to be paid to the contractor or subcontractor.

(c) The retainage shall be paid to any contractor or subcontractor within ninety (90) days of the date his or her work is completed and accepted by the awarding authority. If payment is not made, interest shall be assessed at the rate of ten percent (10%) per annum.

(d) There shall also be deducted and retained from the contract price an additional sum sufficient to pay the estimated cost of municipal police traffic control on any public works project. Municipalities shall directly pay the officers working traffic details and shall bill and be reimbursed by the withholding authority for which the contract is being performed every thirty (30) days until the project is complete.

(e) Notwithstanding the foregoing, with respect to projects located within the town of Warren, the withholding authority shall hold an amount from the contract price which shall be reasonably sufficient to pay the estimated cost of municipal police traffic control. The withholding authority shall pay to the town of Warren within seventy-two (72) hours of written demand the actual costs of police traffic control associated with said project on an ongoing basis.

37-12-11. Substitution of securities for retained earnings.

(a) Where any public works contract as defined by § 37-13-1 provides for the retention of earned estimates by the state of Rhode Island, the contractor may, from time to time, withdraw the whole or any portion of the amount retained for payments to the contractor pursuant to the terms of the contract, upon depositing with the general treasurer either; (1) United States treasury bonds, United States treasury notes, United States treasury certificates of indebtedness, or United States treasury bills; (2) Bonds or notes of the state of Rhode Island ; or (3) Bonds of any political subdivision in the state of Rhode Island.

(b) No amount shall be withdrawn in excess of the market value of the securities at the time of deposit or of the par value of the securities, whichever is lower. The general treasurer shall, on a regular basis, collect all interest or income on the obligations so deposited and shall pay the interest or income, when and as collected, to the contractor who deposited the obligations. If the deposit is in the form of coupon bonds, the general treasurer shall deliver each coupon as it matures to the contractor. Any amount deducted by the state, or by any public department or official thereof, pursuant to the terms of the contract, from the retained payments otherwise due the contractor, shall be

deducted, first from that portion of the retained payments for which no security has been substituted, then from the proceeds of any deposited security. In the latter case, the contractor shall be entitled to receive interest, coupons, or income only from those securities which remain after the amount has been deducted. The securities so deposited shall be properly endorsed by the contractor in such manner so as to enable the general treasurer to carry out the provisions of this section.

TITLE 37

CHAPTER 12.1 SUBSTITUTION OF SECURITY FOR RETAINED EARNINGS OF ARCHITECTS AND ENGINEERS

Sections

- 37-12.1-1. Definition of Terms.
- 37-12.1-2. Substitution of security for retained earnings by designers.
- 37-12.1-3. Deduction from retained earnings.
- 37-12.1-4. Endorsement on securities.
- 37-12.1-5. Applicability.

37-12.1-1. Definition of terms.

Terms used in this chapter shall be construed as follows:

- (a) "Designers", means any person, firm or corporation duly authorized pursuant to the laws of this state to engage in the practice of architecture and/or engineering within this state.
- (b) "Public works contract" means a contract to perform design or planning services by a designer with the state or any agency or governmental subdivisions thereof.
- (c) "Retained earnings" means any moneys or earned estimates withheld from a designer pursuant to the terms of a public works contract.

37-12.1-2. Substitution of security for retained earnings by designers.

(a) Where any public works contract provides for the holding of retained earnings from a designer, the designer may from time to time withdraw the whole or any portion of the amount retained upon either depositing with the general treasurer:

- (1) United States treasury bonds, United States treasury notes, United States treasury certificates of indebtedness, or United States treasury bills;
- (2) Bonds or notes of the state of Rhode Island; or
- (3) Bonds of any political subdivision of the state of Rhode Island.

(b) With respect to the deposit of securities, the general treasurer shall, on a regular basis, collect all interest or income on the securities so deposited and shall pay the interest or income when and as collected to the designer depositing the securities. If the security is in the form of coupon bonds, the general treasurer shall deliver each coupon as it matures to the designer.

37-12.1-3. Deduction from retained earnings.

In the event that pursuant to the terms of the public works contract it is necessary to deduct any sum from retained earnings, the state or governmental unit or agency thereof shall first apply such deduction against sums not withdrawn and thereafter from the proceeds of the sale of any securities deposited or from the income earned on such securities, whichever is applicable.

37-12.1-4. Endorsement on securities.

All securities deposited with the general treasurer pursuant to this chapter shall be properly endorsed by the designer in such manner as to enable the general treasurer to carry out the provisions of this chapter.

37-12.1-5. Applicability.

This chapter shall apply to all retained earnings held pursuant to any public works contract as of [June 16, 1991].

TITLE 37

CHAPTER 13 LABOR AND PAYMENT OF DEBTS BY CONTRACTORS

Sections

- 37-13-1. "Public Works" defined
- 37-13-2. "Contractor" defined – information required.
- 37-13-3. Contractors subject to provisions – Weekly payment of employees.
- 37-13-3.1 State public works contract apprenticeship requirements
- 37-13-4. Provisions applicable to public works contracts – List of Subcontractors.
- 37-13-5. Payment for trucking or materials furnished – Withholding of sums due.
- 37-12-6. Ascertainment of prevailing rate of wages and other payments – Specification of rate in call for bids and in contract.
- 37-13-7. Specification in contract of amount and frequency of payment and wages.
- 37-13-8. Investigation and determination of prevailing wages – Filing of schedule.
- 37-13-9. Statutory provisions included in contracts.
- 37-13-10. Overtime compensation.
- 37-13-11. Posting of prevailing wage rates.
- 37-13-12. Wage records of contractors.
- 37-13-12.1. Obstruction of enforcement.
- 37-13-12.2. Subpoena powers.
- 37-13-12.3. Compelling obedience to subpoenas.
- 37-13-12.4. Penalty for violations.
- 37-13-13. Furnishing payroll record to director of labor.
- 37-13-13.1. Audits of wage records of out of state contractors and subcontractors.
- 37-13-14. Contractor's bond.
- 37-13-14.1. Enforcement – Hearings.
- 37-13-15. Review.
- 37-13-16. Termination of work on failure to pay agreed wages – Completion of work.
- 37-13-17. Private right of action to collect wages or benefits

37-13-1. "Public works" defined.

"Public works" as used in this chapter shall mean any public work consisting of grading, clearing, demolition, improvement, completion, repair, alteration, or construction of any public road or any bridge, or portion thereof, or any public building or portion thereof, or any heavy construction, or any public works projects of any nature or kind whatsoever.

37-13-2. "Contractor" defined - Information required.

The term "contractor" as used in this chapter shall mean the bidder whose bid has been accepted by an authorized agency or awarding authority as the bidder possessing the skills, ability, and integrity necessary to the faithful performance of the contract or work, and who shall certify that he or she is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the contract or work. Essential information in regard to qualifications shall be submitted in such form to the awarding authority and the director of labor and training as the director of labor and training shall require. The authorized agency or awarding authority shall reserve the right to reject all bids, if it be in the public interest to do so.

37-13-3. Contractors subject to provisions - Weekly payment of employees.

All contractors, who have been awarded contracts for public works by an awarding agency or authority of the state or of any city, town, committee, or by any person or persons therein, in which state or municipal funds are used and of which the contract price shall be in excess of one thousand dollars (\$1,000) whether payable at the time of the signing of the contract or at a later date, and their subcontractors, on such public works shall pay their employees at weekly intervals and shall comply with the provisions set forth in 37-13-4 - 37-13-14, inclusive, and 37-13-16.

37-13-3.1. State public works contract apprenticeship requirements.

Notwithstanding any laws to the contrary, all general contractors and subcontractors who perform work on any public works contract awarded by the state after passage of this act and valued at one million dollars (\$ 1,000,000) or more shall employ apprentices required for the performance of the awarded contract. The number of apprentices shall comply with the apprentice to journeyman ratio for each trade approved by the apprenticeship council of the department of labor and training. To the extent that any of the provisions contained in this section conflict with the requirements for federal aid contracts, federal laws and regulations shall control.

37-13-4. Provisions applicable to public works contracts - Lists of subcontractors.

All public works shall be done by contract, subject to the same provisions of law relating thereto and to the letting thereof, which are applicable to similar contracts of the awarding authority or authorized agency, hereinafter called the "proper authority," in the general location where the work is to be performed and which are not contrary to the provisions of 37-13-1 - 37-13-14, and 37-13-16. Each contractor after the award of a contract for public works shall submit to the proper authority a list of his or her subcontractors of any part or all of the work. The list shall be submitted in such manner or form as the proper authority shall uniformly require from contractors in all public works.

37-13-5. Payment for trucking or materials furnished - Withholding of sums due.

A contractor or subcontractor on public works authorized by a proper authority shall pay any obligation or charge for trucking and material which have been furnished for the use of the contractor or subcontractor, in connection with the public works being performed by him or her, within ninety (90) days after the obligation or charge is incurred or the trucking service has been performed or the material has been delivered to the site of the work, whichever is later. When it is brought to the notice of the proper authority in a city or town, or the proper authority in the state having supervision of the contract, that the obligation or charge has not been paid by the contractor or subcontractor, the proper authority may deduct and hold for a period not exceeding sixty (60) days, from sums of money due to the contractor or subcontractor, the equivalent amount of such sums certified by a trucker or material man creditor as due him or her, as provided in this section, and which the proper authority determines is reasonable for trucking performed or materials furnished for the public works.

37-13-6. Ascertainment of prevailing rate of wages and other payments - Specification of rate in call for bids and in contract.

Before awarding any contract for public works to be done, the proper authority shall ascertain from the director of labor and training the general prevailing rate of the regular, holiday, and overtime wages paid and the general prevailing payments on behalf of employees only, to lawful welfare, pension, vacation, apprentice training, and educational funds (payments to the funds must constitute an ordinary business expense deduction for federal income tax purposes by contractors) in the city, town, village, or other appropriate political subdivision of the state in which the work is to be performed, for each craft, mechanic, teamster, laborer, or type of worker needed to execute the contract for the public works. The proper authority shall, also, specify in the call for bids for the contract and in the contract itself the general prevailing rate of the regular, holiday, and overtime wages paid and the payments on behalf of employees only, to the welfare, pension, vacation, apprentice training, and education funds existing in the locality for each craft, mechanic, teamster, laborer, or type of worker needed to execute the contract or work.

37-13-7. Specification in contract of amount and frequency of payment of wages.

Every call for bids for every contract in excess of one thousand dollars (\$ 1,000), to which the state of Rhode Island or any political subdivision thereof or any public agency or quasi-public agency is a party, for construction, alteration, and/or repair, including painting and decorating, of public buildings or public works of the state of Rhode Island or any political subdivision thereof, or any public agency or quasi-public agency and which requires or involves the employment of employees, shall contain a provision stating the minimum wages to be paid various types of employees which shall be based upon the wages that will be determined by the director of labor and training to be prevailing for the corresponding types of employees employed on projects of a character similar to the contract work in the city, town, village, or other appropriate political subdivision of the state of Rhode Island in which the work is to be performed. Every contract shall contain a stipulation that the contractor or his or her subcontractor shall pay all the employees employed directly upon the site of the work, unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment computed at wage rates not less than those stated in the call for bids, regardless of any contractual relationships which may be alleged to exist between the contractor or subcontractor and the employees, and that the scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work; and the further stipulation that there may be withheld from the contractor so much of the accrued payments as may be considered necessary to pay to the employees employed by the contractor, or any subcontractor on the work, the difference between the rates of wages required by the contract to be paid the employees on the work and the rates of wages received by the employees and not refunded to the contractor, subcontractors, or their agents.

(b) The terms "wages" , "scale of wages" , "wage rates" , "minimum wages" , and "prevailing wages" shall include:

(1) The basic hourly rate of pay; and

(2) The amount of:

(A) The rate of contribution made by a contractor or subcontractor to a trustee or to a third person pursuant to a fund, plan, or program; and

(B) The rate of costs to the contractor or subcontractor which may be reasonably anticipated in providing benefits to employees pursuant to an enforceable commitment to carry out a financially responsible plan or program which was communicated in writing to the employees affected, for medical or hospital care, pensions on retirement or death, compensation for injuries or illness resulting from occupational activity, or insurance to provide any of the foregoing, for unemployment benefits, life insurance, disability and sickness insurance, or accident insurance, for vacation and holiday pay, for defraying costs of apprenticeship or other similar programs, or for other bona fide fringe benefits, but only where the contractor or subcontractor is not required by other federal, state, or local law to provide any of the benefits ; provided, that the obligation of a contractor or subcontractor to make payment in accordance with the prevailing wage determinations of the director of labor and training insofar as this chapter of this title and other acts incorporating this chapter of this title by reference are concerned may be discharged by the making of payments in cash, by the making of contributions of a type referred to in subsection (b)(2), or by the assumption of an enforceable commitment to bear the costs of a plan or program of a type referred to in this subdivision, or any combination thereof, where the aggregate of any payments, contributions, and costs is not less than the rate of pay described in subsection (b)(1) plus the amount referred to in subsection (b)(2).

(c) The term "employees" , as used in this section, shall include employees of contractors or subcontractors performing jobs on various types of public works including mechanics, apprentices, teamsters, chauffeurs, and laborers engaged in the transportation of gravel or fill to the site of public works, the removal and/or delivery of gravel or fill or ready-mix concrete, sand, bituminous stone, or asphalt flowable fill from the site of public works, or the transportation or removal of gravel or fill from one location to another on the site of public works, and the employment of the employees shall be subject to the provisions of subsections (a) and (b) .

(d) The terms "public agency" and "quasi-public agency" shall include, but not be limited to, the Rhode Island industrial recreational building authority, the Rhode Island economic development corporation, the Rhode Island airport corporation, the Rhode Island industrial facilities corporation, the Rhode Island refunding bond authority, the Rhode Island housing and mortgage finance corporation, the Rhode Island resource recovery corporation, the Rhode Island public transit authority, the Rhode Island student loan authority, the water resources board corporate, the Rhode Island health and education building corporation, the Rhode Island turnpike and bridge authority, the Narragansett Bay water quality management district commission, Rhode Island telecommunications authority, the

convention center authority, the board of governors for higher education, the board of regents for elementary and secondary education, the capital center commission, the housing resources commission, the Quonset Point-Davisville management corporation, the Rhode Island children's crusade for higher education, the Rhode Island depositors economic protection corporation, the Rhode Island lottery commission, the Rhode Island partnership for science and technology, the Rhode Island public building authority, and the Rhode Island underground storage tank board.

37-13-8. Investigation and determination of prevailing wages - Filing of schedule.

The director of labor and training shall investigate and determine the prevailing wages and payments made to or on behalf of employees, as set forth in § 37-13-7, paid in the trade or occupation in the city, town, village, or other appropriate political subdivision of the state and keep a schedule on file in his or her office of the customary prevailing rate of wages and payments made to or on behalf of the employees which shall be open to public inspection. In making a determination, the director of labor may adopt and use such appropriate and applicable prevailing wage rate determinations as have been made by the secretary of labor of the United States of America in accordance with the Davis-Bacon Act, as amended, 40 U.S.C. § 276a; provided, however, that each contractor awarded a public works contract after July 1, 2007 shall contact the department of labor and training on or before July first of each year, for the duration of such contract to ascertain the prevailing wage rate of wages on a hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done each year and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee every July first.

37-13-9. Statutory provisions included in contracts.

A copy of 37-13-5, 37-13-6, and 37-13-7 shall be inserted in all contracts for public works awarded by the state or any city or town, committee, an authorized agency or awarding authority thereof, or any person or persons in their behalf in which state or municipal funds are used if the contract price be in excess of one thousand dollars (\$1,000).

37-13-10. Overtime compensation.

Labor performed under the provisions of 37-13-1 - 37-13-16, inclusive, during the period of forty (40) hours in any one week and during the period of eight (8) hours in any one day, shall be considered a legal week's work or a legal day's work, as the case may be, and any number of hours of employment in any one week greater than the number of forty (40) hours or in any one day greater than the number of eight (8) hours shall be compensated at the prevailing rate of wages for overtime employment; provided, however, when the director of labor and training has determined in the investigation provided for in 37-13-7 and 37-13-8 that there is a prevailing practice in a city, town, or other appropriate political subdivision to pay an overtime rate of wages for work of any craft, mechanic, teamster, laborer, or type of worker needed to execute the work other than hours worked in any one week greater than the number of forty (40) or in hours worked in any one day greater than the number of eight (8), then the prevailing practice shall determine the legal workday and the legal workweek in the city or town for the work and the prevailing rate of overtime wages shall be paid for such work in excess of that legal workday or week, as the case may be.

37-13-11. Posting of prevailing wage rates.

Each contractor awarded a contract for public works with a contract price in excess of one thousand dollars (\$ 1,000), and each subcontractor who performs work on those public works, shall post in conspicuous places on the project, where covered workers are employed, posters which contain the current, prevailing rate of wages and the current, prevailing rate of payments to the funds required to be paid for each craft or type of worker employed to execute the contract as set forth in §§ 37-13-6 and 37-13- 7, and the rights and remedies of any employee described in § 37-13-17 for nonpayment of any wages earned pursuant to this chapter. Posters shall be furnished to contractors and subcontractors by the director of labor and training, who shall determine the size and context thereof from time to time, at the time a contract is awarded. A contractor or subcontractor who fails to comply with the provisions of this section shall be deemed guilty of a misdemeanor and shall pay to the director of labor and training one hundred dollars (\$ 100) for each calendar day of noncompliance as determined by him or her. Contracts set forth in this section shall not be awarded by the state, any city, town, or any agency thereof until the director of labor and training has prepared and delivered the posters to the division of purchases, if the state or any agency thereof is the proper authority, or to the city, town, or an agency thereof, if it is the proper authority, and the contractor to whom the contract is to be awarded.

37-13-12. Wage records of contractors.

Each contractor awarded a contract with a contract price in excess of one thousand dollars (\$1,000) for public works, and each subcontractor who performs work on those public works, shall keep an accurate record showing the name, occupation, and actual wages paid to each worker employed by him or her and the payments to all the employee funds specified in sections 37-13-6 and 37-13-7 by him or her in connection with the contract or work. The director and his or her authorized representatives shall have the right to enter any place of employment at all reasonable hours for the purpose of inspecting the wage records and seeing that all provisions of this chapter are complied with.

37-13-12.1. Obstruction of enforcement.

Any effort of any employer to obstruct the director and his or her authorized representatives in the performance of their duties shall be deemed a violation of this chapter and punishable as such.

37-13-12.2. Subpoena powers.

The director and his or her authorized representatives shall have power to administer oaths and examine witnesses under oath, issue subpoenas, subpoenas duces tecum, compel the attendance of witnesses, and the production of papers, books, accounts, records, payrolls, documents, and testimony, and to take depositions and affidavits in any proceeding before the director.

37-13-12.3. Compelling obedience to subpoenas.

In case of failure of any person to comply with any subpoena lawfully issued, or subpoena duces tecum, or on the refusal of any witness to testify to any matter regarding which he may be lawfully interrogated, it shall be the duty of the superior court, or any judge thereof, on application by the director, to compel obedience by proceedings in the nature of those for contempt.

37-13-12.4. Penalty for violations.

Except as otherwise provided in this chapter, any employer who shall violate or fail to comply with any of the provisions of this chapter shall be guilty of a misdemeanor and shall be punished by a fine of not less than five hundred dollars (\$500) nor more than one thousand dollars (\$1,000) for each separate offense, or by imprisonment of up to one year, or by both fine and imprisonment. Each day of failure to pay wages due an employee at the time specified in this chapter shall constitute a separate and distinct violation.

37-13-13. Furnishing payroll record to director of labor.

(a) Every contractor and subcontractor awarded a contract for public works as defined by this chapter shall furnish a certified copy of his or her payroll records of his or her employees employed on the project to the awarding authority on a monthly basis for all work completed in the preceding month on a uniform form prescribed by the director of labor and training. Notwithstanding the foregoing, certified payrolls for department of transportation public works may be submitted on the federal payroll form, provided that, when a complaint is being investigated, the director or his or her designee may require that a contractor resubmit the certified payroll on the uniform department form.

(b) Awarding authorities, contractors and subcontractors shall provide any and all payroll records to the director of labor and training within ten (10) days of their request by the director or his or her designee.

(c) In addition, every contractor and subcontractor shall maintain on the site where public works are being constructed and the general or primary contract is one million dollars (\$1,000,000) or more, a daily log of employees employed each day on the public works project. The log shall include, at a minimum, for each employee his or her name, primary job title, and employer and shall be kept on a uniform form prescribed by the director of labor and training. Such log shall be available for inspection on the site at all times by the awarding authority and/or the director of the department of labor and training and his or her designee. This subsection shall not apply to road, highway, or bridge public works projects.

(d) The director of labor and training may promulgate reasonable rules and regulations to enforce the provisions of this section.

(e) The awarding authority of any public works project shall withhold the next scheduled payment to any contractor or subcontractor who fails to comply with the provisions of subsections (a) or (b) above and shall also

notify the director of labor and training. The awarding authority shall withhold any further payments until such time as the contractor or subcontractor has fully complied. If it is a subcontractor who has failed to comply, the amount withheld shall be proportionate to the amount attributed or due to the offending subcontractor as determined by the awarding authority. The department may also impose a penalty of up to five hundred dollars (\$500) for each calendar day of noncompliance with this section, as determined by the director of labor and training. Mere errors and/or omissions in the daily logs maintained under subsection (c) shall not be grounds for imposing a penalty under this subsection.

37-13-13.1. Audits of wage records of out of state contractors and subcontractors.

Out of state contractors or subcontractors who perform work on public works in this state authorize the director of labor and training to conduct wage and hour audits of their payroll records pursuant to the provisions of chapter 14 of title 28.

37-13-14. Contractor's bond.

The state or any city, town, agency, or committee therein awarding contracts for public works shall require the contractor awarded a contract with a contract price in excess of fifty thousand dollars (\$ 50,000) for public works to file with the proper authority good and sufficient bond with surety furnished by any surety company authorized to do business in the state, conditioned upon the faithful performance of the contract and upon the payment for labor performed and material furnished in connection therewith, a bond to contain the terms and conditions set forth in chapter 12 of this title, and to be subject to the provisions of that chapter. Waiver of the bonding requirements of this section is expressly prohibited.

37-13-14.1. Enforcement - Hearing

(a) Before issuing an order or determination, the director of labor and training shall order a hearing thereon at a time and place to be specified, and shall give notice thereof, together with a copy of the complaint or the purpose thereof, or a statement of the facts disclosed upon investigation, which notice shall be served personally or by mail on any person, firm, or corporation affected thereby. The person, firm, or corporation shall have an opportunity to be heard in respect to the matters complained of at the time and place specified in the notice, which time shall be not less than five (5) days from the service of the notice personally or by mail. The hearing shall be held within ten (10) days from the order of hearing. The hearing shall be conducted by the director of labor and training or his or her designee. The hearing officer in the hearing shall be deemed to be acting in a judicial capacity and shall have the right to issue subpoenas, administer oaths, and examine witnesses. The enforcement of a subpoena issued under this section shall be regulated by Rhode Island civil practice law and rules. The hearing shall be expeditiously conducted, and upon such hearing, the hearing officer shall determine the issues raised thereon and shall make a determination and enter an order within ten (10) days of the close of the hearing, and forthwith serve a copy of the order, with a notice of the filing thereof, upon the parties to the proceeding, personally or by mail. The order shall dismiss the charges or direct payment of wages or supplements found to be due, including interest at the rate of twelve percent (12%) per annum from the date of the underpayment to the date of payment, and may direct payment of reasonable attorney's fees and costs to the complaining party.

(b) In addition to directing payment of wages or supplements including interest found to be due, the order shall also require payment of a further sum as a civil penalty in an amount up to three times the total amount found to be due. Further, if the amount of salary owed to an employee pursuant to this chapter but not paid to the employee in violation of thereof exceeds five thousand dollars (\$5,000), it shall constitute a misdemeanor and shall be referred to the office of the attorney general. The misdemeanor shall be punishable for a period of not more than one year in prison and/or fined not more than one thousand dollars (\$1,000). In assessing the amount of the penalty, due consideration shall be given to the size of the employer's business, the good faith of the employer, the gravity of the violation, the history of previous violations, and the failure to comply with recordkeeping or other nonwage requirements. The surety of the person, firm, or corporation found to be in violation of the provisions of this chapter shall be bound to pay any penalties assessed on such person, firm, or corporation. The penalty shall be paid to the department of labor and training for deposit in the state treasury; provided, however, it is hereby provided that the general treasurer shall establish a dedicated "prevailing wages enforcement fund" for the purpose of depositing the penalties paid as provided herein. There is hereby appropriated to the annual budget of the department of labor and training the amount of the fund collected annually under this section, to be used at the direction of the director of labor and training for the sole purpose of enforcing prevailing wage rates as provided in this chapter.

(c) For the purposes of this chapter, each day or part thereof of violation of any provision of this chapter by a person, firm, or corporation, whether the violation is continuous or intermittent, shall constitute a separate and succeeding violation.

(d) In addition to the above, any person, firm, or corporation found in violation of any of the provisions of this chapter by the director of labor and training, an awarding authority, or the hearing officer, shall be ineligible to bid on, or be awarded work by, an awarding authority or perform any such work for a period of no less than eighteen (18) months and no more than thirty-six (36) months from the date of the order entered by the hearing officer. Once a person, firm, or corporation is found to be in violation of this chapter, all pending bids with any awarding authority shall be revoked, and any bid awarded by an awarding authority prior to the commencement of the work shall also be revoked.

(e) In addition to the above, any person, firm, or corporation found to have committed two (2) or more willful violations in any period of eighteen (18) months of any of the provisions of this chapter by the hearing officer, which violations are not arising from the same incident, shall be ineligible to bid on, or be awarded work by, an awarding authority or perform any work for a period of sixty (60) months from the date of the second violation.

(f) The order of the hearing officer shall remain in full force and effect unless stayed by order of the superior court.

(g) The director of labor and training, awarding authority, or hearing officer shall notify the bonding company of any person, firm, or corporation suspected of violating any section of this chapter. The notice shall be mailed certified mail and shall enumerate the alleged violations being investigated.

(h) In addition to the above, any person, firm, or corporation found to have willfully made a false or fraudulent representation on certified payroll records shall be referred to the office of the attorney general. A first violation of this section shall be considered a misdemeanor and shall be punishable for a period of not more than one year in prison and/or fined one thousand dollars (\$1,000). A second or subsequent violation of this section shall be considered a felony and shall be punishable for a period of not more than three (3) years imprisonment, a fine of three thousand dollars (\$3,000), or both. Further, any person, firm, or corporation found to have willfully made a false or fraudulent representation on certified payroll records shall be required to pay a civil penalty to the department of labor and training in an amount of no less than two thousand dollars (\$2,000) and not greater than fifteen thousand dollars (\$15,000) per representation.

37-13-15. Review.

(a) There is hereby created an appeals board which shall be comprised of three (3) members who shall be appointed by the governor; provided, however, that each member of the appeals board shall have at least five (5) years experience with prevailing wage rates as they apply to the construction industry. The members of such appeals board shall serve without compensation. The members of the appeals board shall be appointed for terms of three (3) years except that of the three (3) members originally appointed by each of the appointing authorities; one (1) shall be appointed for a term of one (1) year, one (1) shall be appointed for a term of two (2) years and one (1) for a term of three (3) years.

(b) Any person aggrieved by any action taken by the director of labor and training or his or her designated hearing officer under the authority of this chapter, or by the failure or refusal of the director of labor and training to take any action authorized by this chapter, may obtain a review thereof for the purpose of obtaining relief from the action or lack of action by filing a petition for administrative review and relief, to the appeals board as provided herein. The petition for administrative review shall be filed within twenty (20) days of the action taken by the director of labor and training or designated hearing officer: The petition for administrative review shall be heard within ten (10) days of the date of filing. An aggrieved person under this section shall include:

- (1) Any person who is required to pay wages to his or her employees or make payments to a fund on behalf of his or her employees, as provided in this chapter;
- (2) Any person who is required to be paid wages for his or her labor or on whose behalf payments are required to be paid to funds, as provided by this chapter;
- (3) The lawful collective bargaining representative of a person defined in subdivision (2) above;
- (4) A trade association of which a person defined in subdivision (1) above is a member;
- (5) A proper authority as defined in this chapter;

- (6) A contractor who submitted a bid for work to be or which has been awarded under the provisions of this chapter or a trade association of which he or her is a member, and
 - (7) A labor organization which has one or more written collective bargaining agreements with one or more employers or a trade association which sets forth the hours, wages, and working conditions of a craft, mechanic, teamster, or type of worker needed to execute the work, as provided in this chapter to the extent that it would be affected by the action or the failure to act of the director of labor and training or the hearing officer.
- (c) Any aggrieved person as defined herein may obtain a review of a decision of the appeals board by filing a petition in the superior court in Providence county pursuant to the provisions of the administrative procedures act, praying for review and relief and the petition shall follow the course of and be subject to the procedures for causes filed in the court.
- (d) The director is hereby empowered to enforce his or her decision and/or the decision of the appeals board in the superior court for the county of Providence.

37-13-16. Termination of work on failure to pay agreed wages - Completion of work.

Every contract within the scope of this chapter shall contain the further provision that in the event it is found by the director of labor and training that any employee employed by the contractor or any subcontractor directly on the site of the work covered by the contract has been or is being paid a rate of wages less than the rate of wages required by the contract to be paid as aforesaid, the awarding party may, by written notice to the contractor or subcontractor, terminate his or her right as the case may be, to proceed with the work, or such part of the work as to which there has been a failure to pay the required wages, and shall prosecute the work to completion by contract or otherwise, and the contractor and his or her sureties shall be liable to the awarding party for any excess costs occasioned the awarding authority thereby.

37-13-17. Private right of action to collect wages or benefits

(a) An employee or former employee, or any organization representing such an employee or former employee, of a contractor or subcontractor may bring a civil action for a violation of § 37-13-7 for appropriate injunctive relief, or actual damages, or both within three (3) years after the occurrence of the alleged violation. An action commenced pursuant to this section, may be brought in the superior court for the county where the alleged violation occurred, the county where the complainant resides, or the county where the person against whom in the civil complaint is filed resides or has their principal place of business. Any contractor or subcontractor who violates the provisions of § 37-13-7 shall be liable to the affected employee or employees in the amount of unpaid wages or benefits, plus interest. A civil action filed in court under this section may be instituted instead of, but not in addition to the director of labor and training enforcement procedures authorized by § 37-13-14.1, provided the civil action is filed prior to the date the director of labor and training issues notice of an administrative hearing.

(b) An employer's responsibility and liability is solely for its own employees.

(c) An action instituted pursuant to this section may be brought by one or more employees or former employees on behalf of himself/herself or themselves and other employees similarly situated, except that no employee shall be a party plaintiff to any such action unless he/she gives his/her consent in writing to become such a party and such consent is filed in the court in which such action is brought.

(d) In an action filed under this section in which the plaintiff prevails, the court shall, in addition to any judgment awarded to the plaintiff, require reasonable attorneys' fees and the costs of the action to be paid by the defendant.

(e) The court in an action filed under this section shall award affected employees or former employees liquidated damages in an amount equal to two (2) times the amount of unpaid wages or benefits owed. Unpaid fringe benefit contributions owed pursuant to this section in any form shall be paid to the appropriate benefit fund, however, in the absence of an appropriate fund the benefit shall be paid directly to the individual.

(f) The filing of a civil action under this section shall not preclude the director of labor and training from referring a matter to the attorney general as provided in § 37-13-14.1(b), from prohibiting a contractor or subcontractor from bidding on or otherwise participating in contracts as provided in § 37-13-14.1(d), (e) and (h), or from prohibiting termination of work on failure to pay agreed wages pursuant to § 37-13-16.

(g) Any person, firm, or corporation found to have willfully made a false or fraudulent representation in connection with wage obligations owed on a contract shall be required to pay a civil penalty to the department of labor and training in an amount of no less than one thousand dollars (\$ 1,000) and not greater than three thousand dollars (\$ 3,000) per representation. Such penalties shall be recoverable in civil actions filed pursuant to this section. For purposes of this subsection "willfully" shall mean representations that are known to be false, or representations made with deliberate ignorance or reckless disregard for their truth or falsity.

(h) An employer shall not discharge, threaten, or otherwise discriminate against an employee, or former employee, regarding compensation terms, conditions, locations or privileges of employment because the employee or former employee, or a person or organization acting on his or her behalf: (1) Reports or makes a complaint under this section; or otherwise asserts his or her rights under this section; and/or (2) Participates in any investigation, hearing or inquiry held by the director of labor and training under § 37-13-14.1. In the event a contractor or subcontractor retaliates or discriminates against an employee in violation of this section, the affected employee may file an action in any court of competent jurisdiction and the court shall order reinstatement and/or restitution of the affected employee, as appropriate, with back pay to the date of the violation, and an additional amount in liquidated damages equal to two (2) times the amount of back pay and reasonable attorneys' fees and costs.

(i) If any one or more subsections of this section shall for any reason be adjudged unconstitutional or otherwise invalid, the judgment shall not affect, impair, or invalidate the remaining subsections.

PREVAILING WAGE RATES

(THE PREVAILING WAGE RATES THAT ARE IN EFFECT AT THE TIME THAT THE PROJECT GOES OUT TO BID MUST BE INCLUDED IN THE BID SPECIFICATIONS)

Find current prevailing wage rates using the Department of Labor and Training website:

<https://dlt.ri.gov/regulation-and-safety/prevailing-wage>

TITLE 37

CHAPTER 14.1 MINORITY BUSINESS ENTERPRISE

Sections

| | |
|------------|---|
| 37-14.1-1. | Purpose. |
| 37-14.1-2. | Applicability. |
| 37-14.1-3. | Definitions. |
| 37-14.1-4. | Policy. |
| 37-14.1-5. | Discrimination prohibited. |
| 37-14.1-6. | Minority business enterprise guidelines. |
| 37-14.1-7. | Establishment of criteria and guidelines. |
| 37-14.1-8. | Sanctions. |

37-14.1-1. Purpose.

The purpose of this chapter is to carry out the state's policy of supporting the fullest possible participation of firms owned and controlled by minorities and women (MBE's), in state funded and state directed public construction programs and projects and in state purchases of goods and services. This includes assisting MBE's throughout the life of contracts in which they participate.

37-14.1-2. Applicability.

This chapter shall apply to any and all state purchasing, including, but not limited to the procurement of goods, services, construction projects, or contracts funded in whole or in part by state funds, or funds which, in accordance with a federal grant or otherwise, the state expends or administers or in which the state is a signatory to the construction contract.

37-14.1-3. Definitions.

- (a) "Affirmative action" means taking specific steps to eliminate discrimination and its effects, to ensure nondiscriminatory results and practices in the future, and to involve minority business enterprises fully in contracts and programs funded by the state.
- (b) "Compliance" means the condition existing when a contractor has met and implemented the requirements of this chapter.
- (c) "Contract" means a mutually binding legal relationship or any modification thereof obligating the seller to furnish supplies or services, including construction, and the buyer to pay for them. For purposes of this chapter, a lease is a contract.
- (d) "Contractor" means one who participates, through a contract or subcontract, in any procurement or program covered by this chapter, and includes lessees and material suppliers.
- (e) "Minority" means a person who is a citizen or lawful permanent resident of the United States and who is:
 - (1) Black (a person having origins in any of the black racial groups of Africa);
 - (2) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
 - (3) Portuguese (a person of Portuguese, Brazilian, or other Portuguese culture or origin, regardless of race);
 - (4) Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands);
 - (5) American Indian and Alaskan Native (a person having origins in any of the original peoples of North America.); or
 - (6) Members of other groups, or other individuals, found to be economically and socially disadvantaged by the Small Business Administration under section 8(a) of the Small Business Act, as amended [15 U.S.C. 637(a)].
- (f) "Minority business enterprise" or "MBE" means a small business concern, as defined pursuant to section 3 of the federal Small Business Act [15 U.S.C. 632] and implementing regulations, which is owned and controlled by one or more minorities or women. For the purposes of this chapter, owned and controlled means a business.

- (1) Which is at least fifty-one percent (51%) owned by one or more minorities or women or, in the case of a publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by one or more minorities or women; and
- (2) Whose management and daily business operations are controlled by one or more such individuals.

(g) "MBE coordinator" means the official designated to have overall responsibility for promotion of minority business enterprise in his or her departmental element.

(h) "Noncompliance" means the condition existing when a recipient or contractor has failed to implement the requirements of this chapter.

37-14.1-4. Policy.

It is the policy of the state of Rhode Island that minority business enterprises (MBE's) shall have the maximum opportunity to participate in the performance of procurements and projects outlined in 37-14.1-2.

37-14.1-5. Discrimination prohibited.

No person shall be excluded from participation in, denied the benefits of, or otherwise discriminated against in connection with the award and performance of any project covered by this chapter, on the grounds of race, color, national origin, or sex.

37-14.1-6. Minority business enterprise participation.

Minority business enterprises shall be included in all procurements and construction projects under this chapter and shall be awarded a minimum of ten percent (10%) of the dollar value of the entire procurement or project. The director of the department of administration is further authorized to establish by rules and regulation formulas for giving minority business enterprises a preference in contract and subcontract awards.

37-14.1-7. Establishment of criteria and guidelines.

The director of the department of administration shall establish, by rule and regulations adopted in accordance with chapter 35 of title 42, standards which shall determine whether a construction project is covered by this chapter, compliance formulas, procedures for implementation, and procedures for enforcement which are not inconsistent with 49 CFR 23 of the federal regulations. As to Rhode Island department of transportation contracts, the director of administration may delegate this authority to the director of transportation.

37-14.1-8. Sanctions.

(a) The director of the department of administration shall have the power to impose sanctions upon contractors not in compliance with this chapter and shall include but not be limited to:

- (1) Suspension of payments;
- (2) Termination of the contract;
- (3) Recovery by the state of ten percent (10%) of the contract award price as liquidated damages; and
- (4) Denial of right to participate in future projects for up to three (3) years.

(b) As to Rhode Island department of transportation contracts, the director of the department of administration may delegate this authority to the director of transportation.

RHODE ISLAND REQUIREMENTS FOR PARTICIPATION BY MINORITY BUSINESS ENTERPRISES
IN STATE FUNDED AND DIRECTED PUBLIC CONSTRUCTION PROJECTS, CONSTRUCTION
CONTRACTS AND PROCUREMENT CONTRACTS

In accordance with RI Gen. Law § 37-14.1-1, it is the policy of the State of Rhode Island to support the fullest possible participation of firms owned and controlled by minorities (MBEs) and women (WBEs). Pursuant to §§ 37-14.1-2 and 37-14.1-6, MBEs and WBEs shall be included in all state purchasing, including, but not limited to, the procurement of goods, services, construction projects, or contracts funded in whole or in part with state funds, or funds which, in accordance with a federal grant or otherwise, the state expends or administers. MBEs and WBEs shall be awarded a minimum of ten percent (10%) of the dollar value of the entire procurement or project. MBE participation credit shall only be granted for firms duly certified as MBEs or WBEs by the State of Rhode Island, Department of Administration, Office of Diversity, Equity and Opportunity, MBE Compliance Office (MBECO). The current directory of firms certified as MBEs or WBEs may be accessed at <http://odeo.ri.gov/offices/mbeco/mbe-wbe.php> or by contacting Kate Constance Brody, Esq. Administrator at the MBECO at (401) 574-8670 or via email at Kate.Brody@doa.ri.gov.

TITLE 37

CHAPTER 16 PUBLIC WORKS ARBITRATION

Sections

| | |
|-----------|---|
| 37-16-1. | Short Title. |
| 37-16-2. | Contract provisions for arbitration. |
| 37-16-3. | Application for subcontracts. |
| 37-16-4. | Stay of legal proceedings pending arbitration. |
| 37-16-5. | Jurisdiction of superior court to enforce arbitration provisions and awards. |
| 37-16-6. | Trial upon evidence of substantial issue. |
| 37-16-7. | Method of appointing arbitrators. |
| 37-16-8. | Scheduling and notice of arbitration hearing – Adjournment. |
| 37-16-9. | Power of court to direct prompt hearing. |
| 37-16-10. | Arbitrator's oath – Waiver. |
| 37-16-11. | Powers of arbitrators. |
| 37-16-12. | Fees. |
| 37-16-13. | Validity of awards. |
| 37-16-14. | Arbitration under chapter deemed special proceeding – Jurisdiction of superior court. |
| 37-16-15. | Procedure for hearing of application to court. |
| 37-16-16. | Form of award. |
| 37-16-17. | Court order confirming award. |
| 37-16-18. | Court order vacating award. |
| 37-16-19. | Rehearing after vacation of award. |
| 37-16-20. | Court order modifying or correcting award. |
| 37-16-21. | Notice of motion to vacate, modify, or correct an award. |
| 37-16-22. | Entry of judgment – Costs |
| 37-16-23. | Filing of papers after judgment. |
| 37-16-24. | Effect of judgment. |
| 37-16-25. | Appeals. |
| 37-16-26. | Satisfaction of award. |
| 37-16-27. | Application of sureties. |

37-16-1. Short title.

This chapter shall be known as the "Public Works Arbitration Act".

37-16-2. Contract provision for arbitration.

(a) A provision in a written contract executed on or after January 1, 1962, for the construction, alteration, repair, or painting of any public building, sewer, highway, bridge, water treatment or disposal projects one party to which is the state, a city, a town, or an authority, a board, a public corporation, or any similar body created by statute or ordinance or any committee, agency, or subdivision of any of them, to settle by arbitration any dispute or claim arising out of or concerning the performance or interpretation of the contract shall be valid, irrevocable, and enforceable, save upon grounds existing in law or equity for the revocation of the contract.

(b) (1) Every contract for the construction, alteration, repair, painting, or demolition of any public building, sewer, water treatment or disposal project, highway, or bridge one party to which is the state, a city, a town, or an authority, a board, a public corporation, or any similar body created by statute or ordinance or any committee, agency, or subdivision of any of them which has a contract price of ten thousand dollars (\$ 10,000) or more and which is executed on or after July 1, 1967, shall contain a provision for arbitration of disputes and claims arising out of or concerning the performance or interpretation of the contract as follows:

(2) "All claims, disputes, and other matters in question arising out of or relating to this contract or the performance or interpretation thereof shall be submitted to arbitration. Arbitration shall be commenced by a demand in writing made by one party to the contract upon the other within a reasonable time after the dispute, claim, or other matter in question arose but in no event after payment in full of the contract price has been made and accepted. The written demand shall contain a statement of the question to be arbitrated and a detailed statement of each item or matter in

dispute and the name of the arbitrator appointed by that party. The other party to the contract within ten (10) days of the receipt of the written demand shall appoint an arbitrator and give notice in writing thereof to the party who commenced arbitration. The two (2) arbitrators appointed by the parties shall within ten (10) days of the date of the appointment of the second arbitrator select a third arbitrator who shall be designated as chairperson and who immediately shall give written notice to the parties of his or her appointment. The third arbitrator shall select a time, date, and place for hearing and give each party five (5) days notice in writing thereof. The date for hearing shall not be more than fifteen (15) days after the date of appointment of the third arbitrator. The award shall be made promptly by the arbitrators and, unless otherwise agreed by the parties or specified by law, no later than thirty (30) days from the date of closing the hearing, or, if oral hearings have been waived, from the date of the transmittal of the final statements and proofs to the arbitrators. The award shall be in writing and shall be signed by a majority of the arbitrators. It shall be executed in the manner required by law. The arbitrator shall provide a written explanation of the reasoning for the award. In the event the party of whom arbitration is demanded shall fail to appoint his or her arbitrator within the time specified or the two (2) arbitrators appointed by the parties are unable to agree on an appointment of the third arbitrator within the time specified, either party may petition the presiding justice of the superior court to appoint a single arbitrator who shall hear the parties and make an award as provided herein. The petitioner shall give five (5) days notice in writing to the other party before filing his or her petition."

(c) Any dispute involving claims less than one hundred thousand dollars (\$ 100,000) and associated with construction of a highway or bridge as referred to in subsection (b) shall be submitted to arbitration. Any dispute involving claims of one hundred thousand dollars (\$ 100,000) or more and associated with construction of a highway or bridge as referred to in subsection (b) shall only be arbitrated with the consent of the parties. If the parties fail to consent to arbitration and the state of Rhode Island is a party to the dispute, then the claim will proceed in accordance with § 37-13.1-1.

(d) For the purposes of this section, the term "claims" shall not mean the aggregate amount sought under the contract or in the arbitration, but shall refer specifically to each item or matter in dispute for which additional compensation is sought or for each item for which a credit is sought.

(e) Notwithstanding subsection (a) or (b) of this section, if any contract except for highway and bridge contracts provides for an arbitration procedure, and a method of appointment of an arbitrator or arbitrators, that method shall be followed instead of the method provided in subsection (b) of this section.

(f) This section shall apply to all written contracts executed on or after January 1, 1986.

37-16-3. Application to subcontracts.

When a contract described in 37-16-2 is in effect and any party thereto has entered into a subcontract to perform part of the work and/or furnish any materials in connection with the work described in the contract and the terms of the subcontract provide for arbitration of a dispute or claim concerning the performance or interpretation thereof, or the subcontract, expressly or by reference to the terms of the contract, provides that the parties to the subcontract shall comply with the arbitration provisions of the contract, the following shall apply when a request is made or an order of court is entered for arbitration either under the terms of the contract or subcontract.

(a) When arbitration under the contract may adversely affect the interest of a party thereto because of the effect of an award of the arbitrator or arbitrators upon the performance or interpretation of the terms of a subcontract to which he or she is also a party, he or she may require any other party or all other parties to the subcontract to become a party or parties to the arbitration.

(b) When a party to a subcontract makes a demand or an order of court is entered for arbitration under the terms of the subcontract which comply with the provision of this chapter, any party thereto who is also a party to the contract and whose rights under the contract may be adversely affected by the effect of an award of the arbitrator or arbitrators upon the performance or interpretation of the contract, may require any other party to the contract to become a party to the arbitration.

(c) When a party to a contract or to a subcontract is made a party to arbitration by virtue of the provisions of this section, he or she shall have all the rights of a party to arbitration as provided in this chapter except the appointment of an arbitrator. Provided, however, he or she may object to the arbitrators appointed by the parties in which event a single arbitrator shall be appointed as provided in 37-16-2 in the petition of either of the original parties to arbitration. The award of the arbitrator or arbitrators shall be valid and shall be binding on him or her to

the extent that it affects the performance or interpretation of the contract and/or subcontract to which he or she is a party. The award of the arbitrator or arbitrators may be enforced, modified, or vacated as this chapter provides an award made in an arbitration of a contract described in 37-16-2 may be enforced, modified, or vacated.

37-16-4. Stay of legal proceedings pending arbitration.

If any suit or proceedings be brought upon any issue referable to arbitration under contract in writing providing for arbitration, the court in which the suit is pending upon being satisfied that the issue involved in the suit or proceedings is referable to arbitration under the contract, shall on application of one of the parties, stay the trial of the action until arbitration has been held.

37-16-5. Jurisdiction of superior court to enforce arbitration provision and awards.

The entering into a contract in writing providing for arbitration shall be deemed a consent of all parties, including those enumerated in 37-16-2, thereto to the jurisdiction of the superior court of this state to enforce the arbitration provision and any award made pursuant to that provision. A party aggrieved by the failure, neglect, or refusal of another to perform under a contract providing for arbitration, may petition the superior court, or a judge thereof, for an order directing that arbitration proceed in the manner provided for in the contract. Five (5) days' notice in writing of the application shall be served upon the part in default. Service thereof shall be made in the manner specified in the contract, and if no manner specified therein, then in the manner provided by law for personal service of a summons, within or without the state, or substituted service of a summons, or upon satisfactory proof that the party aggrieved has been or will be unable with due diligence to make service in any of the foregoing manners, then notice shall be served in such manner as the court or judge may direct. A judge of the superior court shall hear the parties and upon being satisfied that there is no substantial issue as to the making of the contract or the failure to comply therewith, the court, or the judge thereof, hearing the application, shall make an order directing the parties to proceed to arbitration in accordance with the terms of the contract.

37-16-6. Trial upon evidence of substantial issue.

If evidentiary facts are set forth raising a substantial issue as to the making of the contract or the failure to comply therewith, the court, or the judge thereof, shall proceed immediately to the trial of the issues. Whenever an immediate trial is ordered, the order therefor shall provide that, if the court finds that a written contract providing for arbitration was made, and that there was a failure to comply therewith, the parties shall proceed with the arbitration in accordance with the terms of the contract and the order shall provide that if the court finds that there was no contract or failure to comply with the contract, then the proceeding shall be dismissed.

37-16-7. Method of appointing arbitrators or umpire.

If in the contract providing for arbitration, provision is made for a method of naming or appointing an arbitrator or arbitrators or an umpire, that method shall be followed, but if no method be provided therein, then the parties to the contract shall agree to the method of naming or appointing an arbitrator or arbitrators or an umpire and if the parties shall fail to agree, then the court or the judge thereof upon application of either of the parties after due notice to the other party shall appoint an arbitrator to hear the dispute.

37-16-8. Scheduling and notice of arbitration hearing - Adjournment.

Subject to the terms of the contract, if any are specified therein, the arbitrators selected as prescribed in this chapter must appoint a time and place for the hearing of the matters submitted to them, and must cause notice thereof to be given to each of the parties. They, or a majority of them, may adjourn the hearing from time to time upon the application of either party for good cause shown or upon their own motion, but not beyond the day fixed if a date in the contract, if any, for rendering their award, unless the time so fixed is extended by the written consent of the parties to the contract or their attorney, or the parties have continued with the arbitration without objection to such adjournment.

37-16-9. Power of court to direct prompt hearing.

The court shall have power to direct the arbitrators to proceed promptly with the hearing and determination of the dispute, claim, or matter in question.

37-16-10. Arbitrator's oath - Waiver.

Before hearing any testimony, arbitrators selected as prescribed in this chapter must be sworn, by an officer authorized by law to administer an oath, faithfully and fairly to hear and examine the claim, dispute, or matter in question and to make a just award according to the best of their understanding, unless the oath is waived by the

written consent of the parties to the contract or their attorneys or the parties have continued with the arbitration without objection to the failure of the arbitrators to take the oath.

37-16-11. Powers of arbitrators.

The arbitrator or arbitrators selected as prescribed in this chapter, may require any person to attend before them as a witness; and he or she and they have, and each of them has, the same powers with respect to all the proceedings before them which are conferred upon a board or a member of a board authorized by law to hear testimony. All the arbitrators selected as prescribed in this chapter must meet together and hear all the allegations and proofs of the parties; but an award by a majority of them is valid.

37-16-12. Fees.

In any proceeding under this chapter, unless the parties agree as to the arbitrator's or arbitrators' fees, such fees shall be fixed by the court or the judges thereof who shall require the payment equally by both parties of the arbitrators' fees.

37-16-13. Validity of awards.

An award shall be valid and enforceable according to its terms and under the provisions of this chapter, without previous adjudication of the existence of a contract to arbitrate, subject, nevertheless, to the provisions of this section:

- (a) A party who has participated in any of the proceedings before the arbitrator or arbitrators may object to the confirmation of the award only on one or more of the grounds hereinafter specified (provided that he did not continue with the arbitration with notice of the facts or defects upon which his objection is based) because of a failure to comply with 37-16-8 or with 37-16-10 or because of the improper manner of the selection of the arbitrators.
- (b) A party who has not participated in any of the proceedings had before the arbitrator or arbitrators and who has not made or been served with an application to compel arbitration under 37-16-5 may also put in issue the making of the contract or the failure to comply therewith, either by a motion for a stay of the arbitration or in opposition to the confirmation of the award. If a notice shall have been personally served upon such party of an intention to conduct the arbitration pursuant to the provisions of a contract specified in the notice, then the issues specified in this subdivision may be raised only by a motion for a stay of the arbitration, notice of which motion must be served within ten (10) days after the service of the notice of intention to arbitrate. The notice must state in substance that unless within ten (10) days after its service, the party served therewith shall serve a notice of motion to stay the arbitration, he or she shall thereafter be barred from putting in issue the making of the contract or the failure to comply therewith. The arbitration hearing shall be adjourned upon service of the notice pending the determination of the motion. Where the opposing party, either on a motion for a stay or in opposition to the confirmation of an award, sets forth evidentiary facts raising a substantial issue as to the making of the contract or the failure to comply therewith, an immediate trial of the same shall be had. In the event that the party is unsuccessful he or she may, nevertheless, participate in the arbitration if the same is still being carried on.

37-16-14. Arbitration under chapter deemed special proceeding - Jurisdiction of superior court.

Arbitration of a claim, dispute, or matter in question under a contract described in this chapter shall be deemed a special proceeding, of which the superior court for Providence County shall have jurisdiction.

37-16-15. Procedure for hearing of application to court.

Any application to the court, or a judge thereof, hereunder shall be made and heard in the manner provided by law for the making and hearing of motions, except as otherwise herein expressly provided.

37-16-16. Form of award.

To entitle the award to be enforced, as prescribed in this chapter, it must be in writing; and, within the time limited in the contract, if any, subscribed by the arbitrator or arbitrators making it and either filed in the office of the clerk of the court having jurisdiction as provided in 37-16-14 or delivered to one of the parties or his or her attorney.

37-16-17. Court order confirming award.

At any time within one year after the award is made, as prescribed in 37-16-16, any party to the contract by the terms of which arbitration was had, may apply to the court having jurisdiction as provided in 37-16-14 for an order confirming the award. Thereupon the court must grant the order unless the award is vacated, modified, or corrected, as prescribed in 37-16-18 and 37-16-19 or unless the award is unenforceable under the provisions of 37-16-13. Notice of the motion must be served upon the adverse party or parties or his or her or their attorneys, as prescribed by law for service of notice of a motion upon an attorney in an action in the same court.

37-16-18. Court order vacating award.

In any of the following cases, the court must make an order vacating the award, upon the application of any party to the controversy which was arbitrated

- (a) When the award was procured by fraud.
- (b) Where the arbitrator or arbitrators exceeded their powers, or so imperfectly executed them, that a mutual, final, and definite award upon the subject matter submitted was not made.
- (c) If there was no valid contract, and the objection has been raised under the conditions set forth in 37-16-13.

37-16-19. Rehearing after vacation of award.

Where an award is vacated, the court, in its discretion may direct a rehearing either before the same arbitrator or arbitrators or before a new arbitrator or arbitrators to be chosen in the manner provided in the contract for the selection of the original arbitrator or arbitrators or as provided for in 37-16-7 and any provision limiting the time in which the arbitrator or arbitrators may make a decision shall be deemed applicable to the new arbitration and to commence from the date of the court's order.

37-16-20. Court order modifying or correcting award.

In any of the following cases, the court must make an order modifying or correcting the award, upon the application of any party to the contract by the terms of which the arbitration was held.

- (a) Where there was an evident miscalculation of figures or an evident mistake in the description of any persons, thing, or property referred to in the award.
- (b) Where the arbitrator or arbitrators have awarded upon a matter not submitted to them, not affecting the merits of the decision upon the matter submitted.
- (c) Where the award is imperfect in a matter of form not affecting the merits of the controversy, and, if it had been a master's report the defect could have been amended or disregarded by the court.

37-16-21. Notice of motion to vacate, modify, or correct an award.

Notice of a motion to vacate, modify, or correct an award must be served upon all adverse parties, or their attorneys, within sixty (60) days after the award is filed or delivered, as prescribed by law for service of notice of a motion upon an attorney in an action; except that in opposition to a motion to confirm an award, any of the grounds specified in 37-16-18 may be set up. For the purpose of the motion, any judge who might make an order, to stay the proceedings in an action brought in the same court may make an order, to be served with the notice of motion, staying the proceedings of an adverse party or parties to enforce the award.

37-16-22. Entry of judgment - Costs.

Upon the granting of an order confirming, modifying, or correcting an award, judgment may be entered in conformity therewith, except as is otherwise prescribed in this chapter. Costs of the application and of the proceedings subsequent thereto, not exceeding twenty-five dollars (\$25.00) and disbursements, may be awarded by the court in its discretion. If awarded, the amount thereof must be included in the judgment.

37-16-23. Filing of papers after judgment.

(a) Immediately after entering judgment, the clerk must attach together and file the following papers:

- (1) The contract, and each written extension of the time, if any, within which to make the award.
- (2) The award.
- (3) Each notice, affidavit or other paper used upon an application to confirm, modify, or correct the award, and a copy of each order of the court upon the application.
- (4) A copy of the judgment.

(b) The judgment may be docketed as if it was rendered in an action.

37-16-24. Effect of judgment.

The judgment so entered has the same force and effect, in all respects as, and is subject to all the provisions of law relating to a judgment in an action. The judgment may be enforced as if it had been rendered in an action in the court in which it is entered.

37-16-25. Appeals.

An appeal may be taken from an order made in a proceeding under this chapter, or from a judgment entered upon an award. The proceedings upon the appeal, including the judgment thereupon and the enforcement of the judgment, are governed by the provisions of statute and rule regulating appeal in actions as far as they are applicable.

37-16-26. Satisfaction of award.

- (a) An award which requires the payment of a sum of money by a city, town, or the state or any body described in 37-16-2 created or organized by or through the authority of any of them, shall be satisfied to the extent of payment of that sum by payment thereof to the party to whom the award was made by the treasurer or officer exercising the duties of a treasurer thereof from its general funds.
- (b) An award which requires the payment of a sum of money to a city, a town, or the state or any body described in 37-16-2 created or organized by or through the authority of any of them shall be satisfied to the extent of payment of that sum by payment thereof to its treasurer or officer exercising the duties of a treasurer thereof who shall deposit the same in its general funds.

37-16-27. Application to sureties.

- (a) If a contractor principal on a bond furnished to guarantee performance or payment on a construction contract and the claimant are parties to a written contract with a provision to submit to arbitration any controversy thereafter arising under the contract, or subject to arbitration as provided in 37-16-2(b), the arbitration provisions shall apply to the surety for all disputes involving questions of the claimant's right of recovery against the surety. Either the claimant, the contractor principal, or surety may demand arbitration in accordance with the written contract or as provided in 37-16-2(b) if applicable in one arbitration proceeding, provided that the provisions of 37-16-3 shall be applicable to any such demand for arbitration. The arbitration award shall decide all controversies subject to arbitration between the claimant, on the one hand, and the contractor principal and surety on the other hand, including all questions involving liability of the contractor principal and surety on the bond, but a claimant must file suit for recovery against the surety within the time limits set forth in 37-12-2 and 37-12-5. The arbitration shall be in accordance with this chapter and the court shall enter judgment thereon as provided therein.
- (b) The arbitrator or arbitrators, if more than one, shall make findings of fact as to the compliance with the requirements for recovery against the surety, and those findings of fact shall be a part of the award binding on all parties to the arbitration.

TITLE 45

CHAPTER 55 AWARD OF MUNICIPAL CONTRACTS

SECTIONS

- 45-55-1 Legislative findings
- 45-55-2. Method of source selection
- 45-55-3. Purchasing agent - Appointment - Duties.
- 45-55-4. Definitions.
- 45-55-5. Competitive sealed bidding.
- 45-55-5.1. Business exempt.
- 45-55-5.2. Town of North Smithfield - Exemption.
- 45-55-6. Competitive negotiation.
- 45-55-7. Negotiations after unsuccessful competitive sealed bidding
- 45-55-8. Sole source procurement and emergency procurements.
- 45-55-8.1 Qualification based selection of architects and engineers.
- 45-55-9. Small purchases.
- 45-55-10. Cancellation of invitation for bids and requests for proposals.
- 45-55-11. Responsibilities of bidders and offerors
- 45-55-12. Prequalification of contractors - General.
- 45-55-13. Exclusion of state mandated costs.
- 45-55-13.1. Exclusion of multi-cities or towns insurance corporations and cooperative risk management programs.
- 45-55-13.2. Exclusion of multi-cities or towns energy aggregation programs.
- 45-55-13.3. Exclusion of multi-school district combined purchasing consortia
- 45-55-14. Staff consultants.
- 45-55-15. Severability.
- 45-55-16 Prohibition against the use of lead based paints.
- 44-55-17 Penalties

45-55-1. Legislative findings.

It is hereby declared that a need exists to establish a uniform system for the award of contracts by municipalities, utilizing open cooperative bids.

45-55-2. Method of source selection.

Except as otherwise authorized by law, all municipal contracts shall be awarded by:

- (1) Competitive sealed bidding, pursuant to 45-55-5;
- (2) Competitive negotiations, pursuant to 45-55-6;
- (3) Non-competitive negotiations, pursuant to 45-55-7 and 45-55-8;
- (4) Small purchase procedures, pursuant to 45-55-9.
- (5) Qualification based selection (QBS) process for architects/engineers pursuant to 45-55-8.1

45-55-3. Purchasing agent - Appointment - Duties.

Within each city or town or quasi public agency there shall be designated a person or persons to act as purchasing officer to exercise the powers and duties as set forth in this chapter.

45-55-4. Definitions.

The words defined in this section have the following meanings whenever they appear in this chapter, unless the context in which they are used clearly requires a different meaning or a different definition is prescribed for a particular section, group of sections or provision.

- (1) "Business" means any corporation, partnership, individual, sole proprietorship, joint stock company, joint venture, or any other legal entity through which business is conducted.
- (2) "Change order" means a written order signed by the purchasing agent, or contractor directing or allowing the contractor to make changes which the changes clause of the contract authorizes the purchasing agent or contractor to order without the consent of the contractor or purchasing agent.
- (3) "Construction" means the process of building, altering, repairing, improving, or demolishing any public structures or building, or other public improvements of any kind to any public real property. It does not include the routine maintenance or repair of existing structures, buildings, or real property performed by salaried employees of the municipality in the usual course of their job.
- (4) "Contract" means all types of agreements, including grants and orders, for the purchase or disposal of supplies, services, construction, or any other item. It includes awards; contracts of a fixed-price, cost, cost-plus-a-fixed-fee, or incentive type; contracts providing for the issuance of job or task orders; leases; letter contracts, purchase orders, and construction management contracts. It also includes supplemental agreements with respect to any of the preceding. "Contract" does not include labor contracts with employees of the municipality.
- (5) "Contract modification" means any written alteration in the specifications, delivery point, rate of delivery, contract period, price, quantity, or other contract provisions of any existing contract, whether accomplished by unilateral action in accordance with a contract provision, or by mutual action of the parties to the contract. It includes bilateral actions, as supplemental agreements, and unilateral actions, as change orders, administrative changes, notices of termination, and notices of the exercise of a contract option.
- (6) "Contractor" means any person having a contract with a municipality.
- (8) "Data" means recorded information, regardless of form or characteristic.
- (8) "Designee" means a duly authorized representative of a person holding a superior position.
- (9) "Employee" means an individual drawing a salary from a municipality, whether elected or not, and any non-salaried individual performing personal services for any municipality.
- (10) "May" means permissive.
- (11) "Municipality" means the individual cities and towns of the state of Rhode Island.
- (12) "Negotiation" means contracting by either of the methods described in §§ 45-55-6, 45-55-7, and 45-55-8.
- (13) "Person" means any business, individual, organization, or group of individuals.
- (14) "Procurement" means the purchasing, buying, renting, leasing, or otherwise obtaining of any supplies, services, or construction. It also includes all functions that pertain to the obtaining of any supply, service, or construction item, including description of requirements, selection and solicitation of sources, preparation and award of contract, and all phases of contract administration.
- (15) "Purchasing officer" means the person designated in each municipality or quasi public agency pursuant to section 45-55-3.
- (16) "Regulations" means rules and regulations adopted by the individual cities or towns, concerning the implementation of the provisions of this chapter.

(17) "Services" means the rendering, by a contractor, of its time and effort rather than the furnishing of a specific end product, other than reports which are merely incidental to the required performance of services. "Services" does not include labor contracts with employees of governmental agencies.

(18) "Shall" means imperative.

(19) "Supplemental agreement" means any contract modification which is accomplished by the mutual action of the parties.

(20) "Supplies" means all property, including, but not limited to, leases of real property, printing and insurance, except land or permanent interest in land.

45-55-5. Competitive sealed bidding.

(a) Contracts exceeding the amount provided by 45-55-9 shall be awarded by competitive bidding unless they are professional engineering/architectural services pursuant to 45-55-8.1 and it is determined in writing that this method is not practicable. Factors to be considered in determining whether competitive sealed bidding is practicable shall include whether:

- (1) Specifications can be prepared that permit award on the basis of either the lowest qualified bid price or the lowest qualified evaluated bid price; and
 - (2) The available sources, the time and place of performance, and other relevant circumstances as are appropriate for the use of competitive sealed bidding.
- (b) The invitation for bids shall state whether award shall be made on the basis of the lowest bid price or the lowest evaluated or responsive bid price. If the latter basis is used, the objective measurable criteria to be utilized shall be stated in the invitation for bids, if available.
- (c) Adequate public notice of the invitation for bids shall be given a sufficient time prior to the date stated in the notice for the opening of bids. Notice may include publication in a newspaper of general circulation in the state as determined by the purchasing officer for the municipality not less than seven (7) days nor more than twenty-one (21) days before the date set for opening of the bids. The purchasing officer may make a written determination that the twenty-one (21) day limitation needs to be waived. The written determination shall state the reason why the twenty-one (21) day limitation is being waived and shall state the number of days, giving a minimum and maximum, before the date set for the opening of bids when public notice is to be given.
- (4) Bids shall be opened publicly in full view of the public at the time and place designated in the invitation for bids. Each bid, together with the name of the bidder, shall be recorded and an abstract made available for public inspection. Subsequent to the awarding of the bid, all documents pertinent to the awarding of the bid shall be made available and open to public inspection and retained in the bid file.
- (5) The contract shall be awarded with reasonable promptness by written notice to the responsive and responsible bidder whose bid is either the lowest bid price, or lowest evaluated or responsive bid price.
- (6) Correction or withdrawal of bids may be allowed only to the extent permitted by regulations issued by the purchasing officer.

45-55-5.1. Business exempt.

The North Kingstown Bus Contractors Association and the Scituate School Bus Owners Club shall be exempt from the provisions of this chapter.

45-55-5.2. Town of North Smithfield - Exemption.

The town of North Smithfield is exempt from the provisions of this chapter with regard to the contracting for fire and rescue services with the Primrose Volunteer Fire Department and/or North Smithfield Fire Department and/or their respective successors and assigns.

45-55-6. Competitive negotiation.

- (a) When, under regulations adopted by the city or town council, the purchasing agent determines in writing that the use of competitive sealed bidding is not practicable, and except as provided in 45-55-8, 45-55-9, and 45-55-10 a contract may be awarded by competitive negotiation.
- (b) Adequate public notice of the request for proposals shall be given in the same manner as provided in 45-55-5(c).
- (c) Contracts may be competitively negotiated when it is determined, in writing, by the purchasing agent that the bid prices received by competitive sealed bidding either are unreasonable as to all or part of the requirements, or were not independently reached in open competition, and for which:
 - (1) Each competitive bidder has been notified of the intention to negotiate and is given reasonable opportunity to negotiate; and
 - (2) The negotiated price is lower than the lowest rejected bid by any competitive bidder; and
 - (3) The negotiated price is the lowest negotiated price offered by a competitive offeror.
- (d) The request for proposals shall indicate the relative importance of price and other evaluation factors.
- (e) Award shall be made to the responsible offeror whose proposal is determined in writing to be the most advantageous to the municipality taking into consideration price and the evaluation factors set forth in the request for proposals.
- (f) Written or oral discussions shall be conducted with all responsible offerors who submit proposals determined, in writing, to be reasonably susceptible of being selected for award. Discussions shall not disclose any information derived from proposals submitted by competing offerors. Discussions need not be conducted:
 - (1) With respect to prices, where such prices are fixed by law or regulation, except that consideration shall be given to competitive terms and conditions; or
 - (2) Where time of delivery or performance will not permit discussions; or
 - (3) Where it can be clearly demonstrated and documented from the existence of adequate competition or accurate prior cost experience with the particular supply, service, or construction item, that acceptance of an initial offer without discussion would result in fair and reasonable prices, and the request for proposals notifies all offerors of the possibility that award may be made on the basis of the initial offers.

45-55-7. Negotiations after unsuccessful competitive sealed bidding.

- (a) In the event that all bids submitted pursuant to competitive sealed bidding under 45-55-5 result in bid prices in excess of the funds available for the purchase, and the purchasing officer determines in writing:
 - (1) That there are no additional funds available from any source so as to permit an award to the lowest responsive and responsible bidder, and
 - (2) The best interest of the municipality will not permit the delay attendant to a re-solicitation under revised specifications, or for revised quantities, under competitive sealed bidding as provided in 45-55-5, then a negotiated award may be made as stated in subsection (b) or (c) of this section.
- (b) Where there is more than one bidder, competitive negotiations pursuant to 45-55-6, shall be conducted with the three (3) (two (2) if there are only two (2)) bidders determined in writing, to be the lowest responsive and responsible bidders to the competitive sealed bid invitation. Competitive negotiations shall be conducted under the following restrictions:
 - (1) If discussions pertaining to the revision of the specifications or quantities are held with any potential offeror, all other potential offerors shall be afforded an opportunity to take part in the discussions; or

(2) A request for proposals, based upon revised specifications or quantities, shall be issued as promptly as possible, shall provide for an expeditious response to the revised requirements, and shall be awarded upon the basis of the lowest bid price, or lowest evaluated bid price submitted by any responsive and responsible offeror.

(c) When after competitive sealed bidding, it is determined in writing, that there is only one responsive and responsible bidder, a noncompetitive negotiated award may be made with such bidder in accordance with 45-55-8.

45-55-8. Sole source procurement and emergency procurements.

(a) A contract may be awarded for a supply, service, or construction item without competition when, under published regulations, the purchasing officer determines, in writing, that there is only one source for the required supply, service, or construction item.

(b) Notwithstanding any other provision of this chapter, the purchasing agent may make or authorize others to make emergency procurements when there exists a threat to public health, welfare, or safety under emergency conditions as defined in regulations or where the procurement will be in the best interest of the city as established by properly promulgated rules and regulations; provided, that such emergency procurements shall be made with such competition as is practicable under the circumstances. A written determination of the basis for the emergency, and for the selection of the particular contractor, shall be included in the contract file.

45-55-8.1. Qualification based selection of architects and engineers.

When the purchasing agent determines that the city or town needs the services of a professional architect or engineer, the purchasing agent shall follow the qualification based selection process for the procurement of architectural and engineering consulting services.

45-55-9. Small purchases.

Procurements, not to exceed an aggregate amount of ten thousand dollars (\$10,000) for construction and five thousand dollars (\$5,000) for all other purchases may be made in accordance with small purchase regulations promulgated by the municipality. These amounts shall be increased or decreased annually hereafter at the same rate as the Boston Regional Consumer Price Index. Procurement requirements shall not be artificially divided so as to constitute a small purchase under this section. A municipality may further reduce the aggregate purchase amount, as provided for in this section by ordinance.

45-55-10. Cancellation of invitation for bids and requests for proposals.

An invitation for bids, a request for proposals, or other solicitation may be canceled, or all bids or proposals rejected, if it is determined, in writing, that such action if taken is not in the best interest of the municipality and approved by the chief purchasing officer.

45-55-11. Responsibilities of bidders and offerors.

(1) A written determination of responsibility of a bidder or offeror shall be made and it shall be made in accordance with regulations issued by the municipality.

A reasonable inquiry to determine the responsibility of a bidder or offeror may be conducted. The failure of a bidder or offeror to promptly supply information in connection with a reasonable inquiry may be grounds for a determination of non-responsibility with respect to a bidder or offeror.

(2) Except as otherwise provided, by law, information furnished by a bidder or offeror pursuant to this section may not be disclosed outside of the purchasing department administering the contract without prior written consent of the bidder or offeror.

45-55-12. Prequalification of contractors - General.

The municipality may provide for prequalification of suppliers as responsible prospective contractors for particular types of supplies, services, and construction. Municipalities which choose to provide for prequalification of suppliers shall adopt regulations for prequalification in the same manner provided for in the adoption of ordinances in the manner provided for in the legislative or home rule charter of the municipality. Solicitation mailing lists of

potential contractors of supplies, services, and construction shall include but need not be limited to prequalified contractors. Prequalification shall not foreclose a written determination:

- (1) Between the time of the bid opening or receipt of offers and the making of an award, that a prequalified supplier is not responsible; or
- (2) That a supplier who is not prequalified at the time of bid opening or receipt of offers is responsible.

45-55-13. Exclusion of state mandated costs.

The provisions of 45-13-7 through 45-13-10 do not apply to this section.

45-55-13.1. Exclusion of multi-cities or towns insurance corporations and cooperative risk management programs.

The provisions of this chapter shall not apply to entities organized pursuant to section 45-5-20.1. Those entities are exempt from all of the provisions of this chapter.

45-55-13.2. Exclusion of multi-cities or towns energy aggregation programs.

The provisions of this chapter do not apply to entities organized for the purpose of negotiating the purchase of electric power pursuant to § 39-3-1.1, or energy or energy related services. Those entities are exempt from all provisions of this chapter.

45-55-13.3. Exclusion of multi-school district combined purchasing consortia.

The provisions of this chapter do not apply to purchases and contracts entered into by those consortia established pursuant to § 16-2-9.2, and such entities shall be exempt from all provisions of this chapter.

45-55-14. Staff consultants.

The procurement of the service of an attorney, physician or dentist by a municipality, is exempt from the provisions of this chapter.

45-55-15. Severability.

If any one or more sections, clauses, sentences or parts of this chapter are for any reason be adjudged unconstitutional or otherwise invalid in any court, that judgment shall not affect, impair or invalidate the remaining provisions of this chapter but shall be confined in its operation to the specific provisions so held unconstitutional or invalid and the inapplicability or invalidity of any section, clause or provisions of this chapter in any one or more instances or circumstances shall not be taken to affect or prejudice in any way its applicability or validity in any other instance.

45-55-16. Prohibition against the use of lead based paints.

When purchasing paint products or contracting or subcontracting for painting, construction, improvement, completion, or repair of any public buildings, public road, public bridge, or public construction, all municipalities, as defined by 45-55-4(11), shall be prohibited from the use of lead based paint.

45-55-17. Penalties.

Any person who knowingly and intentionally violates any provision of this chapter shall be subject to a misdemeanor, punishable by a fine of not more than five hundred dollars (\$500), or by imprisonment for not more than one year, or both.

DAVIS-BACON PREVAILING WAGE REQUIREMENTS

(a) GENERAL CONTRACT AND SUBCONTRACT PROVISIONS

For any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF or a construction project under the DWSRF financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in §5.1 or the FY 2010 appropriation, the following clauses shall be inserted in full:

(1) Minimum Wages

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in §5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Wage determinations may be obtained from the U.S. Department of Labor's website, www.dol.gov.

(ii)(A) The Owner, on behalf of the EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

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

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

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

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Owner agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the Owner to the State award official. The State award official will transmit the request to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210 and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the Owner do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the award official shall refer the questions, including the views of all interested parties and the recommendation of the State award official, to the Administrator for determination. The request shall be sent to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

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

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

(2) Withholding

The Owner, shall upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this

contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and Basic Records

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Owner, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the Owner shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the owner for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of

compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the Owner.

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

(1) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

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

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

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and Trainees

(i) *Apprentices.* Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of

Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) *Trainees*. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

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

(5) Compliance with Copeland Act Requirements

The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts

The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the (write in the name of the Federal agency) may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract Termination: Debarment

A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act Requirements

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes Concerning Labor Standards

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the Owner, the State, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of Eligibility

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(b) CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

For any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act, the following clauses set forth in paragraphs (b) (1), (2), (3) and (4) of this section shall be inserted in full. These clauses shall be inserted in addition to the clauses required in Section (a), above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime Requirements

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

(2) Violation; Liability for Unpaid Wages; Liquidated Damages

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

(3) Withholding for Unpaid Wages and Liquidated Damages

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

(4) Subcontracts

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

(c) MAINTENANCE OF RECORDS

In addition to the clauses contained in Section (a), above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in §5.1 the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Owner, the State, EPA and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

(d) COMPLIANCE VERIFICATION

(1) The Owner shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(6), all interviews must be conducted in confidence. The Owner must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.

(2) The Owner shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, the Owner should conduct interviews with a representative group of covered employees within two weeks of each contractor or subcontractor's submission of its initial weekly payroll data and two weeks prior to the estimated completion date for the contract or subcontract. Owners must conduct more frequent interviews if the initial interviews or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB . Owners shall immediately conduct necessary interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.

(3) The Owner shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The Owner shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable, the Owner should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract . Owners must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the Owner shall verify evidence of fringe benefit plans and payments thereunder by contractors and subcontractors who claim credit for fringe benefit contributions.

(4) The Owner shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees

and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.

(5) Owners must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at <http://www.dol.gov/esa/contacts/whd/america2.htm>.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF WATER

MEMORANDUM

SUBJECT: Prohibition on Certain Telecommunication and Video Surveillance Services or Equipment in the SRF Programs

FROM: Kiri Anderer, P.E., Acting Associate Branch Chief
Infrastructure Branch, OGWDW

Michael Deane, Branch Chief
State Revolving Fund Branch, OWM

TO: SRF Branch Chiefs
Regions 1-10

Effective August 13, 2020, recipients and subrecipients of EPA funded assistance agreements, including borrowers under EPA funded revolving loan funds, must comply with regulations at [2 CFR 200.216](#), *Prohibition on certain telecommunication and video surveillance services or equipment*, implementing section 889 of [Public Law 115-232](#). The regulation prohibits the use of Federal funds to procure (enter into, extend, or renew contracts) or obtain equipment, systems, or services that use “covered telecommunications equipment or services” identified in the regulation as a substantial or essential component of any system, or as critical technology as part of any system. Prohibitions extend to the use of Federal funds by recipients and subrecipients to enter into a contract with an entity that “uses any equipment, system, or service that uses covered telecommunications equipment or services” as a substantial or essential component of any system, or as critical technology as part of any system. Certain equipment, systems, or services, including equipment, systems, or services produced or provided by entities subject to the prohibition are recorded in the [System for Award Management](#) exclusion list.

As described in section 889 of Public Law 115-232, covered telecommunications equipment or services includes:

- Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
- Telecommunications or video surveillance services provided by such entities or using such equipment.

- Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Applicability in the State Revolving Fund (SRF) Programs

Clean Water and Drinking Water SRF (CWSRF and DWSRF) programs may not expend equivalency funds for these products on or after August 13, 2020. States must ensure that equivalency assistance agreements include the telecommunications prohibition condition [provided by EPA's Office of Grants and Debarment](#) (OGD) in OGD's most recent EPA General Terms and Conditions. The condition must also be in construction contracts associated with equivalency assistance agreements.

There is no exhaustive list of components and services that fall under the prohibition. State SRF managers and local assistance recipients should exercise due diligence and be particularly mindful of project components with internet or cellular connections. For example, recipients should be mindful of automatic meter reading (AMR) technology and advanced metering infrastructure (AMI), instrumentation control systems (e.g. process control systems, distributed control systems and programmable logic controls), and security cameras and other electronic security measures to ensure that those items are procured from a non-excluded entity. Items included in the prohibition are not eligible SRF costs, and the SRF programs cannot reimburse borrowers for these costs.

The prohibition also applies to the CWSRF administrative funds (if states are billing those costs to the federal CWSRF capitalization grant) and the four DWSRF set-asides. States should be mindful of items such as cell phones, computers, and mobile WiFi routers or hotspots funded by those accounts.

If you have questions on the implementation of this grant condition, please contact Michael Deane at Deane.Michael@epa.gov or Kiri Anderer at Anderer.Kirsten@epa.gov.

American Iron and Steel Requirement

The Contractor acknowledges to and for the benefit of the City of Pawtucket Water Supply Board ("Purchaser") and the State of Rhode Island ("State") that it understands the goods and services under this Agreement are being funded with monies made available by the Drinking Water State Revolving Fund that have statutory requirements commonly known as "American Iron and Steel" that requires all of the iron and steel products used in the project be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the State. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover damages against the Contractor any loss, expense, or cost (including without limitation attorneys' fees) incurred by the Purchaser or State resulting from such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of this project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

SIGNATURE OF BIDDER

DATE

TITLE

COMPANY

Title of RFP or Bid:

23-046: Replacement of Water Meters and Appurtenances

Build America, Buy America

The Contractor acknowledges to and for the benefit of the City of Pawtucket Water Supply Board (“Owner”) and the State of Rhode Island (“Funding Authority”) that it understands the goods and services under this Agreement are being funded with federal monies and have statutory requirements commonly known as “Build America, Buy America;” that requires all of the iron and steel, manufactured products, and construction materials used in the project to be produced in the United States (“Build America, Buy America Requirements”) including iron and steel, manufactured products, and construction materials provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Owner and Funding Authority (a) the Contractor has reviewed and understands the Build America, Buy America Requirements, (b) all of the iron and steel, manufactured products, and construction materials used in the project will be and/or have been produced in the United States in a manner that complies with the Build America, Buy America Requirements, unless a waiver of the requirements is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the Build America, Buy America Requirements, as may be requested by the Owner or the Funding Authority. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Owner or Funding Authority to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Owner or Funding Authority resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the Funding Authority or any damages owed to the Funding Authority by the Owner). If the Contractor has no direct contractual privity with the Funding Authority, as a lender or awardee to the Owner for the funding of its project, the Owner and the Contractor agree that the Funding Authority is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the Funding Authority.

SIGNATURE OF BIDDER

DATE

TITLE

COMPANY

Title of RFP or Bid:

23-046: Replacement of Water Meters and Appurtenances

SRF SIGNAGE SPECIFICATIONS



THIS PROJECT IS FUNDED BY THE

STATE REVOLVING FUND

JOINTLY ADMINISTERED BY THE

**Rhode Island
Infrastructure Bank**

Vahid Ownjazayeri
Chair

Jeffrey R. Diehl
Executive Director



**State of Rhode Island
Department of Health**

Daniel J. McKee
Governor

James V. McDonald,
MD, MPH, Interim Director-
RIDOH



"Dedicated To Protecting And Preserving Our State's Most Important Resource...Clean Water"



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"Dedicated To Protecting And Preserving Our State's Most Important Resource...Clean Water"

Black

Navy Blue

Black

Green &
Navy Blue

Navy Blue

Grade

Navy Blue

Black

Navy Blue

8'



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"Dedicated To Protecting And Preserving Our State's Most Important Resource...Clean Water"

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SECTION 00310
BID (PROPOSAL)

SECTION 00310

BID (PROPOSAL)

Place _____

Date _____

Bid (Proposal) of _____ (hereinafter called "Bidder")* a corporation, organized and existing under the laws of the State of _____, * a partnership, or an *individual doing business

as _____.

To the City of Pawtucket, Rhode Island, acting herein through its Pawtucket Water Supply Board (hereinafter called the "Owner").

Gentlemen:

The Bidder, in compliance with your Advertisement for Bids for the WATER DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT MR-14 in the City of Pawtucket, City of Central Falls, and the Town of Cumberland, Rhode Island, for the City of Pawtucket, Rhode Island, acting through the Pawtucket Water Supply Board, 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, supplies, and anything else required or necessary, and to construct the project in accordance with the Contract Documents, within the time set forth therein and at the prices stated in the Schedule of Bid Items, which are to cover all expenses incurred in performing the work required under the Contract Documents of which this bid is a part.

The Bidder hereby agrees to commence work under this contract on or before a date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the project within 730 consecutive calendar days thereafter as stipulated in the Specifications. Bidder further agrees to pay as liquidated damages, the sum of **\$1000.00** for each consecutive calendar day thereafter, as hereinafter provided in the Contract and General Conditions.

Bidder acknowledges receipt of the following addendum:

*Insert corporation, partnership, or individual as applicable.

TOTAL BASE BID: The Bidder agrees to perform all the construction work described in the specifications and shown on the drawings for the following unit prices and for the TOTAL BASE BID.

ITEMS FOR BID

| ITEM NO. | ITEM DESCRIPTION | TOT. BASE BID APPROXIMATE QUANTITY | UNIT MEAS. | UNIT BID PRICE DOLL. & CENTS | TOTAL BASE BID AMOUNT DOLL. & CENTS |
|----------|--|------------------------------------|------------|------------------------------|-------------------------------------|
| 1. | Mobilization and Demobilization / Yard (not to exceed \$50,000) | <u>1</u> | L.S. | \$ _____ | \$ _____ |
| | At _____ | | | | Per L.S. |
| 2. | Test Pits | <u>30</u> | EA. | \$ <u>500.00</u> | \$ <u>15,000.00</u> |
| | At <u>Five Hundred Dollars and No Cents</u> | | | | Per EA. |
| 3. | Rock Removal (Provisional) | <u>250</u> | C.Y. | \$ <u>275.00</u> | \$ <u>68,750.00</u> |
| | At <u>Two Hundred Seventy - Five Dollars and No Cents</u> | | | | Per C.Y. |
| 4. | Crushed Processed Gravel | <u>13,500</u> | C.Y. | \$ _____ | \$ _____ |
| | At _____ | | | | Per C.Y. |
| 5. | Furnish & Install 4" Duct. Iron Pipe (Provisional) | <u>70</u> | L.F. | \$ _____ | \$ _____ |
| | At _____ | | | | Per L.F. |
| 6. | Furnish & Install 6" Duct. Iron Pipe | <u>1,600</u> | L.F. | \$ _____ | \$ _____ |
| | At _____ | | | | Per L.F. |
| 7. | Furnish & Install 8" Duct. Iron Pipe | <u>31,000</u> | L.F. | \$ _____ | \$ _____ |
| | At _____ | | | | Per L.F. |

ITEMS FOR BID

| ITEM NO. | ITEM DESCRIPTION | TOT. BASE BID APPROXIMATE QUANTITY | UNIT MEAS. | UNIT BID PRICE DOLL. & CENTS | TOTAL BASE BID AMOUNT DOLL. & CENTS |
|----------|---|------------------------------------|------------|------------------------------|-------------------------------------|
| 8. | Furnish & Install 10" Duct. Iron Pipe (Provisional) | <u>100</u> | L.F. | \$ _____ | \$ _____ |
| | At _____ | | | | Per L.F. |
| 9. | Furnish & Install 12" Duct. Iron Pipe | <u>280</u> | L.F. | \$ _____ | \$ _____ |
| | At _____ | | | | Per L.F. |
| 10. | Furnish & Install Ductile Iron Fittings with thrust (AWWA C153) | <u>26,000</u> | LBS. | \$ _____ | \$ _____ |
| | At _____ | | | | Per LB. |
| 11. | Furnish & Install 4" Gate Valve and Valve Box | <u>5</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 12. | Furnish & Install 6" Gate Valve and Valve Box | <u>50</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 13. | Furnish & Install 8" Gate Valve and Valve Box | <u>97</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 14. | Furnish & Install 12" Gate Valve and Valve Box | <u>4</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |

ITEMS FOR BID

| ITEM NO. | ITEM DESCRIPTION | TOT. BASE BID APPROXIMATE QUANTITY | UNIT MEAS. | UNIT BID PRICE DOLL. & CENTS | TOTAL BASE BID AMOUNT DOLL. & CENTS |
|----------|--|------------------------------------|------------|------------------------------|-------------------------------------|
| 15. | Furnish, Install & Remove Linestop (6" to 12") (Provisional) | <u>8</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 16. | Furnish & Install Insertion Valve (6" & 8") (Provisional) | <u>10</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 17. | Furnish & Install 4" to 24" Cast Couplings | <u>250</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 18. | Furnish and Install Fire Hydrant | <u>11</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 19. | Reset Existing Fire Hydrant | <u>30</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 20. | Furnish & Install 1" Copper Service Pipe | <u>3,700</u> | L.F. | \$ _____ | \$ _____ |
| | At _____ | | | | Per L.F. |
| 21. | Furnish & Install 1" Corporation Stop | <u>565</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |

ITEMS FOR BID

| ITEM NO. | ITEM DESCRIPTION | TOT. BASE BID APPROXIMATE QUANTITY | UNIT MEAS. | UNIT BID PRICE DOLL. & CENTS | TOTAL BASE BID AMOUNT DOLL. & CENTS |
|----------|---|------------------------------------|------------|------------------------------|-------------------------------------|
| 22. | Furnish & Install 1" Curb Stop (Provisional) | <u>20</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 23. | Furnish & Install 2" Copper Service Pipe | <u>130</u> | L.F. | \$ _____ | \$ _____ |
| | At _____ | | | | Per L.F. |
| 24. | Furnish & Install 2" Corporation Stop | <u>12</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 25. | Furnish & Install 2" Curb Stop (Provisional) | <u>4</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 26. | Remove & Dispose Abandoned Water Service | <u>40</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 27. | Furnish & Install 2-inch Air Release/Blowoff Assembly and Box | <u>4</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 28. | Class A & B Cement Concrete Complete In-Place | <u>72</u> | C.Y. | \$ _____ | \$ _____ |
| | At _____ | | | | Per C.Y. |

ITEMS FOR BID

| ITEM NO. | ITEM DESCRIPTION | TOT. BASE BID APPROXIMATE QUANTITY | UNIT MEAS. | UNIT BID PRICE DOLL. & CENTS | TOTAL BASE BID AMOUNT DOLL. & CENTS |
|----------|--|------------------------------------|------------|------------------------------|-------------------------------------|
| 29. | Furnish & Install 2" Bypass Pipe (Provisional) | <u>1,600</u> | L.F. | \$ _____ | \$ _____ |
| | At _____ | | | | Per L.F. |
| 30. | Furnish & Install 4" Bypass Pipe (Provisional) | <u>2,100</u> | L.F. | \$ _____ | \$ _____ |
| | At _____ | | | | Per L.F. |
| 31. | Temporary Pavement 4" State, Municipal, Town Roads | <u>19,254</u> | S.Y. | \$ _____ | \$ _____ |
| | At _____ | | | | Per S.Y. |
| 32. | Permanent Pavement 4" State, Municipal, Town Roads (Provisional) | <u>507</u> | S.Y. | \$ _____ | \$ _____ |
| | At _____ | | | | Per S.Y. |
| 33. | Permanent Pavement 9" State Roads (Provisional) | <u>200</u> | S.Y. | \$ _____ | \$ _____ |
| | At _____ | | | | Per S.Y. |
| 34. | Concrete Base Road Repair - State Roads (Provisional) | <u>40</u> | S.Y. | \$ _____ | \$ _____ |
| | At _____ | | | | Per S.Y. |
| 35. | Temp. and Perm. Repair Traffic Control loop (Provisional) | <u>4</u> | EA. | \$ <u>2,500.00</u> | \$ <u>10,000.00</u> |
| | At <u>Two Thousand Five Hundred Dollars and No Cents</u> | | | | Per EA. |

ITEMS FOR BID

| ITEM NO. | ITEM DESCRIPTION | TOT. BASE BID APPROXIMATE QUANTITY | UNIT MEAS. | UNIT BID PRICE DOLL. & CENTS | TOTAL BASE BID AMOUNT DOLL. & CENTS |
|----------|---------------------------------------|------------------------------------|------------|------------------------------|-------------------------------------|
| 36. | Mechanical "Full Size" Street Sweeper | <u>300</u> | HRS. | \$ _____ | \$ _____ |
| | At _____ | | | | Per HR. |
| 37. | Traffic Control Certified Flagperson | <u>2000</u> | HRS. | \$ _____ | \$ _____ |
| | At _____ | | | | Per HR. |
| 38. | Remove & Dispose Abandoned Road Box | <u>20</u> | EA. | \$ _____ | \$ _____ |
| | At _____ | | | | Per EA. |
| 39. | Work Crew Time Delay | <u>80</u> | HRS. | \$ _____ | \$ _____ |
| | At _____ | | | | Per HR. |

TOTAL BASE BID \$ _____

Dollars

(Total Base Bid in writing)

TOTAL BASE BID: Under the TOTAL BASE BID stated above, the Bidder shall perform all of the work and furnish all of the labor, materials, equipment, appurtenances, and services, and do all other work required, necessary and incidental for the installation of IMPROVEMENTS CONTRACT MR-14 in accordance with the Drawings and Specifications.

Unit prices and extended amounts are to be shown in both words and figures. In case of discrepancy, the unit price in words will govern.

In accordance with common practice, where a quantity is labeled "Provisional", use of the item is either not anticipated or no estimate of quantity can be made, but the item is included to establish a price under this contract, usually in the event such work is required owing to unforeseen field conditions. Provisional items are subject to deletion in entirety where not required or necessary. Provisional item quantities may be subject to variation depending on the conditions encountered.

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

Bidder agrees that this bid shall be good and shall not be withdrawn for a period of 90 calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this bid, bidder shall execute the formal contract attached within five (5) days and deliver a Surety bond or Bonds as required in the General Conditions. The Bid Security attached in the sum of (10% of bid) _____ dollars (\$ _____) shall become the property of the Owner in the event the Contract and bond are not executed within the time set forth above, as liquidated damages for the delay and additional expense to the Owner caused thereby.

The undersigned bidder declares that this proposal in all respects is fair and made without collusion with any other person, firm or corporation making a proposal for this work.

The undersigned hereby declares that, in regard to all conditions affecting work to be done and the labor and materials required, this bid (proposal) is based on his investigations and findings, and that the Owner and the Engineer and their officers, agents and employees shall not in any manner be held responsible for the accuracy of or be bound by any estimates, borings, indications of borings or spoils or rock, water or underground conditions relative to the proposed work, indicated in this or in the other contract documents; that no warranty or representation has been made by the Owner or the Engineer or their officers, agents and employees as to subsurface soil or rock condition; groundwater; or other underground and similar conditions; nor has any representation or warranty been so made that the estimated quantities to be used for comparison of bid will even approximate the actual quantities of materials and work which the contractor may be required to perform.

Respectfully submitted,

name of Company*

By _____

Title _____

Business Address _____

Phone No. _____

(seal if bid is by corporation)

*Note: Insert bidder's name. If a corporation, give the State of incorporation using the phrase "A corporation organized under the laws of _____, composed of officers as follows:

President

Vice President

Secretary

Treasurer"

If a partnership, give names of partners, using the phrase "copartners trading and doing business under the Firm name and style of _____, composed of partners as follows:

_____"

At a duly authorized meeting of the Board of Directors of the _____

_____ held on _____
(name of corporation) (date)

at which all the Directors were present or waived notice, it was voted that

(name) (officer)
of this company be, and he hereby is, authorized to execute bidding documents,
contracts and bonds in the name and on the behalf of said company, and affix its
corporate seal thereto, and such execution of any such contract of obligation in
this company's name on its behalf by such _____

(officer)

under seal of the company shall be valid and binding upon this company.

A true copy

ATTEST

(clerk)

Place of Business _____

I hereby certify that I am the clerk of the _____

_____, that _____

is duly elected _____ of said company, and that the above vote
(officer)

has not been amended or rescinded and remains in full force and effect as of the date
of this contract.

Corporate Seal

DATE: _____

Clerk

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned, _____
_____, as Principal, and _____
_____, as Surety, are hereby held and firmly bound unto
the Pawtucket Water Supply Board, acting through its Chairman hereinafter
called the Owner in the penal sum of _____
_____ Dollars (\$ _____), for the payment of which will and truly
be made, we hereby jointly and severally bind ourselves, our heirs, executors,
administrators, successors and assigns.

Signed this _____ day of _____, 20____.

The CONDITION OF THE ABOVE OBLIGATION is such that whereas the Principal has
submitted to the Pawtucket Water Supply Board, a certain bid attached
hereto and hereby made a part hereof to enter into a contract in writing for
CONTRACT MR-14, in the City of Pawtucket,
for the Pawtucket Water Supply Board, City of Pawtucket, Rhode Island.

NOW THEREFORE,

- (a) If said bill shall be rejected or in the alternate:
- (b) If said bill shall be accepted and the principal shall execute and deliver a contract in the form of contract attached hereto (properly completed in accordance with said bid) and shall furnish a bond for his faithful performance of said contract and for the payment of all persons performing labor and furnishing materials in connection therewith and shall in all other respects perform the agreement created by the acceptance of said bid, then his obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall in no way be impaired or affected by any extension of the time within which the Owner may accept such bid; and said Surety does hereby waive notice of any extension.

IN WITNESS WHEREOF, the Principal and Surety have hereunto set their hands and seals and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

(Principal)

SEAL

By _____

(Surety)

SEAL

By _____

CITY OF PAWTUCKET
PURCHASING DEPARTMENT
CITY HALL, 137 ROOSEVELT AVENUE
PAWTUCKET, RHODE ISLAND

BID FOR: CONTRACT MR-14

The undersigned, as bidder, having fully informed himself regarding the accuracy of the statements made herein, certifies that:

1. No person or persons other than those named herein are interested in this Bid (Proposal), and that this bid has been made without collusion with any other person, firm or corporation;
2. No person or persons acting in any official capacity for the Owner is/are directly or indirectly interested in the proposed work or any portion of the profit thereof; and
3. The contents of the Bid have not been communicated by the bidder or his employees or agents to any person not an employee or agent of the bidder or his surety on any bond furnished with the Bid, and will not be communicated to any such person or persons prior to the official opening of the Bid.

The undersigned bidder further certifies that this statement is executed for the purposes of inducing the Pawtucket Water Supply Board to consider the bid and make an award in accordance therewith.

Legal Name of Bidder

Business Address

Signature and Title of Person
Authorized to Sign

Date

THE BIDDER SHALL STATE THE NAMES OF ALL
SUBCONTRACTORS THAT HE PROPOSES TO USE

PROPOSED SUBCONTRACTORS

If none, write "None" _____.

* Description of Work _____

Proposed Subcontractor, Name _____

Address _____

* Description of Work _____

Proposed Subcontractor, Name _____

Address _____

* Description of Work _____

Proposed Subcontractor, Name _____

Address _____

* Description of Work _____

Proposed Subcontractor, Name _____

Address _____

*Insert description of work and subcontractors' names as may be required.

This is to certify that the names of the above-mentioned subcontractors are submitted with full knowledge and consent of the respective parties.

The bidder warrants that none of the subcontractors have any conflict of interest as respects this contract.

Bidder _____
(Fill in Name)

By _____
(Signature and Title)

CONTRACTOR'S QUALIFICATION STATEMENT

The Undersigned certifies under oath the truth and correctness of all statements and all answers to questions made hereinafter.

SUBMITTED TO: _____

SUBMITTED BY: _____

NAME: _____

ADDRESS: _____

PRINCIPAL OFFICE: _____

- () Corporation
- () Partnership
- () Individual
- () Joint Venture
- () Other _____

(NOTE: Attach separate sheets as required)

1. How many years has your organization been in business as a General Contractor? _

2. How many years has your organization been in business under its present name?

3. If a Corporation answer the following:

Date of Incorporation: _____

State of Incorporation: _____

President: _____

Vice-President: _____

Secretary: _____

Treasurer: _____

4. If a Partnership, answer the following:

Date of Organization: _____

Type of Partnership: _____

(General/Limited/Assoc.)

Name and address of all partners:

5. If other than a corporation or partnership, describe Organization and name Principals:

6. What percent of the work do you normally perform with your own forces? _____ List trades:

7. Have you ever failed to complete any work awarded to you? If so, indicate when, where, and why:

8. Has any Officer or Partner of your Organization ever been an Officer or Partner of another Organization that failed to complete a construction contract? _____ If so, state circumstances:

9. List major construction projects your Organization has under contract on this date:

Project Name _____

Owner _____

Architect/Engineer _____

Contract Amount _____ Contract Date _____

Percent Complete _____ Scheduled Completion _____

10. List similar major construction projects your Organization has completed in the last ten years: **(Contractor must supply written evidence that he has at least ten years of experience with similar projects of equal size and scope and has successfully completed at least four of these projects in the last ten years)**

Project Name _____

Owner _____

Architect/Engineer _____

Contract Amount _____ Date Awarded _____

Date Completed _____ Percent With Own Forces _____

Project Name _____

Owner _____

Architect/Engineer _____

Contract Amount _____ Date Awarded _____

Date Completed _____ Percent With Own Forces _____

Project Name _____

Owner _____

Architect/Engineer _____

Contract Amount _____ Date Awarded _____

Date Completed _____ Percent With Own Forces _____

Project Name _____

Owner _____

Architect/Engineer _____

Contract Amount _____ Date Awarded _____

Date Completed _____ Percent With Own Forces _____

11. List of the plant and equipment available to properly and expeditiously perform the work:

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

12. List the construction experience of the principal individuals in your Organization:

Individual's Name _____

Construction Experience-years _____

Present Position and Years Experience _____

Dollar Volume Responsibility _____

Previous Position and Years Experience _____

Individual's Name _____

Construction Experience-years _____

Present Position and Years Experience _____

Dollar Volume Responsibility _____

Previous Position and Years Experience _____

13. List states and categories in which your Organization is legally qualified to do business:

| |
|-------|
| _____ |
| _____ |

14. Bank References

15. Trade References

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

16. Name of Bonding and Insurance Companies and Name and Address of Agents:

17. The undersigned agrees to furnish, upon request by the Owner, if being considered for award of contract for the project upon which a bid proposal has been submitted within 48 hours after the Bid Opening, a current Statement of Financial Conditions, including Contractor's latest regular financial statement or balance sheet which must contain the following items:

Current Assets: (Cash, joint venture accounts, accounts receivable, notes receivable, accrued interest on notes, deposits, and materials and prepaid expenses), net fixed assets and other assets.

Current Liabilities: (Accounts payable, notes payable, accrued interest on notes, provision for income taxes, advances received from owners, accrued salaries, accrued payroll taxes), other liabilities, and capital (capital stock, authorized and outstanding shares par values, earned surplus).

18. Dated at _____ this _____ day of

_____ 20 _____

Name of Organization: _____

By: _____

Title: _____

19. NOTARIZATION: State of _____ County
of _____ M _____
being duly sworn deposes and says that he (she) is the
_____ of _____
contractor(s) and that the foregoing questions and all
statements therein contained are true and correct.
Subscribed and sworn before me this _____
day of _____ 20_____

Notary Public: _____

My Commission Expires: _____

ANTI-KICKBACK ACKNOWLEDGMENT

ALL BIDDERS/OFFERORS MUST ATTEST TO THE FOLLOWING:

The vendor acknowledges, under the pains and penalties of perjury, that he/she has not been offered, paid, or solicited for any contribution or compensation, nor has he/she been granted a gift, gratuity, or other consideration, either directly or indirectly by any officer, employee or member of the governing body of the City of Pawtucket who exercises any functions or responsibilities in connection with either the award or execution of the project to which this contract pertains.

Further, the vendor acknowledges, under the pains and penalties of perjury, that he/she has not offered, paid, or solicited by way of any contribution or compensation, nor has he/she granted a gift, gratuity or other consideration either directly or indirectly to any officer, employee, or member of the governing body of the City of Pawtucket who exercises any functions or responsibilities in connection with either the award or execution of the project to which this project or contract pertains.

SIGNATURE OF OFFEROR

DATE

TITLE

COMPANY

Title of RFP or Bid:

BID NO. 24-041 - Water Distribution System Improvements - Contract MR-14

ORIGINAL: AUGUST/2001REVISED: APRIL/2006

SECTION 00530
CONTRACT FORMS

CONTRACT

THIS AGREEMENT, made this _____ day of _____, by and between Pawtucket Water Supply Board, acting through its Chairman hereinafter called "Owner", and _____ doing business as (an individual), or (a partnership), or (a Corporation), hereinafter called "Contractor."

WITNESSETH: That in consideration of the payments and agreements hereinafter mentioned:

1. The Contractor will commence and complete the construction of the CONTRACT MR-14 for the Pawtucket Water Supply Board.
2. The Contractor will furnish all of the material, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the Project described herein.
3. The Contractor will commence the work required by the Contract Documents on or before a date to be specified in a written Notice to Proceed, and will fully complete the Project within 730 consecutive calendar days including the winter shutdown period unless the period for completion is extended otherwise by the Contract Documents. Bidder further agrees to pay as liquidated damages, the sum of \$1,000.00 for each consecutive calendar day thereafter as 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 bid price of \$ _____ and 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. Non-Collusive Bid Statement
 - f. Statement of Bidders Qualifications
 - g. Notice of Award
 - h. Contract
 - i. Payment Bond
 - j. Performance Bond
 - k. Notice to Proceed
 - l. General Conditions
 - m. Supplemental General Conditions
 - n. Special Conditions
 - o. Drawings prepared by the Owner
 - p. Technical Specifications
 - q. Appendix "A"
 - r. Appendix "B"
 - s. Change Order(s)

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 Agreement 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 Agreement in Four (4) Copies, each of which shall be deemed an original, on the date first above written.

Signed and sealed in Presence

_____ By _____
Contractor (company name)

By _____
Signature and Title

PAWTUCKET WATER SUPPLY BOARD

By _____
William Masuck
Chairman

Approved by vote of the Pawtucket Water
Supply Board at a regularly scheduled
meeting held on _____.
(Date)

The undersigned, in compliance with the City of Pawtucket
By-Laws and the applicable Rhode Island General Laws
Certifies that an appropriation in the amount required
For this contract is available.

By _____.
Michael Lecours
PWSB Chief Financial Officer

CORPORATE CERTIFICATION

During a regular meeting of the Board of Directors of the _____
held on the _____ day of _____, 20____, at which a quorum was present,
the following officers were duly elected and will serve until their successors
shall be elected:

| NAME | TITLE |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

Under the charter, constitution, by-laws, or other rules governing the transaction
of all business of said organization, and pursuant to vote of the governing body of
said organization that _____

(Name)

holding the office of _____ has full authority to sign
(Title)

this contract committing said corporation to the fulfillment of all aspects of such
contract.

(Signature)

(Title)

Corporate "Seal"

I certify under the penalties of perjury that I, to my best knowledge and belief, have filed all state tax returns and paid all state taxes required under law.

Contractor (company name)

Signature of Individual *
or Corporate Name (Mandatory)

By: Corporate Officer
(Mandatory, if applicable)

** Social Security # (Voluntary)
or Federal Identification Number

*Approval of a contract or other agreement will not be granted unless this certification clause is signed by the applicant.

**Your social security number will be furnished to the Rhode Island Department of Revenue to determine whether you have met tax filing or tax payment obligations. Providers who fail to correct their non-filing or delinquency will not have a contract or other agreement issued, renewed or extended.

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this CONTRACT has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

(Name of person signing contract)

(Name of company)

BONDS AND CERTIFICATES

PERFORMANCE BOND

The Performance Bond shall be submitted utilizing an "Industry Standard" type form for such a contract document. An acceptable performance bond document to be furnished by the Contractor shall be AIA Document A312 (latest revision) or EJCDC Documents C-610 (latest revision).

POWER OF ATTORNEY

Attorney-in-fact who sign Contract Bonds must file with each Bond a certified copy of their power of attorney to sign said Bond.

LABOR AND MATERIAL BOND

The Labor and Material Bond shall be submitted utilizing an "Industry Standard" type form for such a contract document. An acceptable labor and material bond document to be furnished by the Contractor shall be AIA Document A312 (latest revision) or EJCDC Documents C-615 (latest revision).

POWER OF ATTORNEY

Attorney-in-fact who sign Contract Bonds must file with each Bond a certified copy of their power of attorney to sign said Bond.

CERTIFICATE OF OWNER'S ATTORNEY

I, Joseph A. Keough, Jr., the duly authorized and acting legal representative of the Pawtucket Water Supply Board, acting herein through its Chairman, do hereby certify as follows:

I have examined the foregoing Contract and Surety Bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties on behalf of the Pawtucket Water Supply Board acting through their duly authorized representatives, that said representatives of the Pawtucket Water Supply Board have full power and authority to execute said agreement on behalf of the Pawtucket Water Supply Board.

Joseph A. Keough, Jr.
KEOUGH & SWEENEY, LTD.
41 Mendon Avenue
Pawtucket, RI 02861
(401) 724-3600

DATE _____

CONDITIONS OF THE CONTRACT

SECTION 00721
GENERAL CONDITIONS

INDEX TO GENERAL CONDITIONS

| <u>ARTICLE</u> | <u>TITLE</u> |
|----------------|---|
| 1----- | CONTRACT AND CONTRACT DOCUMENTS |
| 2----- | DEFINITIONS |
| 3----- | SCOPE OF WORK |
| 4----- | DRAWINGS AND SPECIFICATIONS |
| 5----- | ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS |
| 6----- | INTERPRETATION OF DRAWINGS AND SPECIFICATIONS |
| 7----- | WORK TO BE ACCOMPLISHED IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS |
| 8----- | SHOP OR SETTING DRAWINGS |
| 9----- | INDEMNIFICATION |
| 10----- | CONTRACTOR'S RESPONSIBILITY |
| 11----- | CONTRACTOR'S TITLE TO MATERIAL |
| 12----- | INSPECTION AND TESTING OF MATERIALS |
| 13----- | MATERIALS |
| 14----- | "OR APPROVED EQUAL" CLAUSE |
| 15----- | PATENTS |
| 16----- | OTHER CONTRACTS |
| 17----- | COMPLETENESS OF WORK |
| 18----- | CONTRACTOR TO CHECK DIMENSIONS AND SCHEDULES |
| 19----- | REPRESENTATIONS OF CONTRACTOR |
| 20----- | INTERFERENCE WITH EXISTING STRUCTURES |
| 21----- | EXISTING UTILITIES OR CONNECTIONS |
| 22----- | PROTECTION OF PERSONS OR PROPERTY |
| 23----- | PROTECTION OF WORK AND PROPERTY-EMERGENCY |
| 24----- | WATER |

25-----SUPERINTENDENCE AND WORKMEN
26-----INSPECTION
27-----REPORTS, RECORDS AND DATA
28-----WEATHER CONDITIONS
29-----SUBLETTING
30-----INSURANCES
31-----CONTRACT SECURITY
32-----SUBSTITUTE BOND
33-----TIME FOR COMPLETION AND LIQUIDATED DAMAGES
34-----MUTUAL RESPONSIBILITY OF CONTRACTORS
35-----CORRECTION OF WORK
36-----CHANGES IN PLANS AND SPECIFICATIONS
37-----EXTRA WORK
38-----CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES
39-----PAYMENTS BY CONTRACTOR
40-----CONFORMANCE WITH DRAWINGS
41-----CHANGES IN THE WORK
42-----CHANGES IN CONTRACT PRICE
43-----PAYMENTS TO CONTRACTOR
44-----ASSIGNMENTS
45-----ACCEPTANCE OF FINAL PAYMENT AS A RELEASE
46-----FINAL CERTIFICATE AND PAYMENT
47-----ACCEPTANCE OF FINAL CERTIFICATE
48-----RIGHT TO WITHHOLD PAYMENTS
49-----NOTICE OF WARNING
50-----TERMINATION OF CONTRACT
51-----PERMITS
52-----LAWS AND ORDINANCES

53-----RELEASE OF PAYMENT AND PERFORMANCE BONDS
54-----RIGHT TO USE WORK
55-----WORKING HOURS
56-----PROVISIONS REQUIRED BY LAW DEEMED INSERTED
57-----WAIVER
58-----ADDRESS
59-----USE OF PREMISES AND REMOVAL OF DEBRIS
60-----ESTIMATED QUANTITIES
61-----RIGHT-OF-WAY AND SUSPENSION OF WORK
62-----MACHINERY AND EQUIPMENT
63-----GENERAL GUARANTY
64-----PROCEDURE IN CONSTRUCTION
65-----OTHER PROHIBITED INTERESTS
66-----OWNER'S AUTHORITY
67-----OWNER MAY STOP WORK
68-----LIENS
69-----WORK SUBJECT TO CONTROL OF OWNER
70-----OWNER'S CONTROL NOT LIMITED
71-----CONTRACTOR'S OBLIGATIONS
72-----ABBREVIATIONS
73-----SAFETY AND HEALTH REGULATIONS
74-----TAXES
75-----WAGE RATES
76-----ACCESS TO THE WORK
77-----SUBSURFACE STRUCTURES AND UTILITIES
78-----ARBITRATION
79-----PRE-CONDITION SURVEY
80-----TRENCH COMPACTION TESTING

SECTION 00721

GENERAL CONDITIONS

ARTICLE 1 CONTRACT AND CONTRACT DOCUMENTS

- (a) The Drawings, the Specifications and the Addendum (or Addenda), the Advertisement for Bids, the Information for Bidders, and the Bid (Proposal) as accepted by the Owner as evidenced by the Owner's Notice of Award to the Contractor, which notice is made a part of this Contract, the General Conditions, and the Special Conditions, shall form a part of this Contract, and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The table of contents, titles, headings, running headlines and marginal references to various provisions of the Contract Documents are in no way to affect, limit or cast light on the interpretation of the provisions to which they refer. Whenever the term "Contract Documents" is used, it shall mean and include all items listed in this Contract.
- (b) The Contractor hereby agrees to commence work under this Contract on or within ten (10) days after a date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the project within the period specified in this Contract. The Contractor further agrees to pay, as liquidated damages, the sum specified for each consecutive calendar day thereafter.

ARTICLE 2 DEFINITIONS

- (a) The word "Municipality" as used in the Contract Documents or in discussions concerning or appertaining to the work as a whole, shall mean the City of Pawtucket, Rhode Island. The words "City" or "Owner", when used, shall also mean the Pawtucket Water Supply Board acting herein through its Chairman.
- (b) Whenever the word "Engineer" is used in reference to the work or any part thereof or in the Contract Documents, it shall mean the Owner's duly authorized representative.
- (c) Whenever the word "Bidder" is used in the Contract Documents, it shall mean any individual, partnership, firm or corporation submitting an approved proposal for the work contemplated.
- (d) Whenever the word "Contractor" is used, it shall mean the person or persons or co-partnership or corporation contracting to perform the work to be done under the Contract Documents or the legal representatives of such party or parties.
- (e) Whenever the word "Subcontractor" is used in the Contract Documents, it shall mean the person, firm or corporation supplying labor and materials or only labor for work at the site of the project for and under separate contract or agreement with the Contractor.

- (f) Whenever the word "Surety" is used in the Contract Documents, it shall mean the corporate body which is Surety on the Contractor's bond for the payment of all debts for materials and labor used or employed in the execution of the contract and for the acceptable performance of the work.
- (g) Whenever the words "City Solicitor" are used, they shall mean the City Solicitor of the City of Pawtucket, Rhode Island or the Attorney assigned by the city solicitor to perform legal services for the Pawtucket Water Supply Board.
- (h) Whenever the word "Bid" is used in the Contract Documents, it shall mean the proposal submitted by the bidder and similarly the "Proposal" shall mean bid.
- (i) Whenever the word "Plans" is used in the Contract Documents, it shall mean the drawings or reproductions of drawings pertaining to the construction of the work or to any structure connected therewith. The word "Drawings" may sometimes be used and it shall be understood to mean "Plans".
- (j) Whenever the word "Specifications" is used in the Contract Documents, it shall mean the description, directions, provisions and requirements contained in the Contract Documents, together with all written agreements made or to be made pertaining to the method and manner of performing the work or to the quantities and qualities of materials to be furnished under this contract.
- (k) Whenever the word "Addendum" is used in the Contract Documents, it shall mean any written interpretation, clarification, amendment or addition to the original Plans or Specifications issued by the Owner.
- (l) Whenever the word "Project" is used, it shall mean the entire work to be executed under the contract.
- (m) Whenever the word "Contract" is used in the Contract Documents, it shall mean the contract covering the performance of the work and the furnishing of materials required therefore as evidenced by the Contract Documents.
- (n) For Definitions of Abbreviations, Refer to Article 72, "Abbreviations".
- (o) Wherever in the specifications or upon the contract drawings the words directed, required, permitted, ordered, instructed, designated, considered necessary or words of like import are used, it shall be understood that the direction, requirement, permission, order, instruction, designation or decision of the Owner is intended; wherever the words as shown, as indicated, as detailed or words of similar import are used, it shall be understood that reference to the drawings accompanying these specifications is made unless otherwise stated; and similarly the words approved, acceptable, satisfactory or words of like import, shall mean approved by or acceptable to or satisfactory to the

Owner. As used herein "provided" shall be understood to mean "Provided complete in place," that is "furnished and installed complete."

- (p) Wherever the phrases "substantial completion" or "substantially complete" are used in the Contract Documents, they shall mean the completion of construction of all installations, completely tested and accepted and being sufficiently completed so that the project or specified part can be used for the purposes for which it is intended.
- (q) Designation of Number and Gender: All words used in the singular number shall extend to and include the plural. All words used in the plural number shall extend to and include the singular. All words used in any gender shall extend to and include all genders.

ARTICLE 3 SCOPE OF WORK

- (a) The Contractor shall furnish all labor, materials, equipment, power, water, light, heat, fuel, tools, appliances, supplies, traffic control coordination, incidentals, and all other means of construction necessary or proper for executing and completing the project; he shall do all work including extra and additional work and pay all costs connected therewith; restore to their original conditions all surfaces disturbed; pay cost of all insurance; bear all losses due to the nature of the work and costs incidental to suspension or discontinuance of the work except as otherwise provided; assume all responsibility of whatever nature of kind, indemnify the Owner from all claims; secure and pay for all permits unless otherwise provided; conform to all city, county, state, municipal or federal legislation and requirements; he shall do all work necessary to conform the project to the Contract Documents and shall leave intact the work of any adjoining contractors unless otherwise ordered by the Owner; perform and complete the work in a manner best calculated to permit rapid construction, consistent with safety of life and property and satisfactory to the Owner and in strict accordance with the Contract Documents; he shall protect the work during construction, clean up the work during and after construction and maintain it until final acceptance, as hereinafter provided.
- (b) The Contractor shall do all work and pay all costs of protecting, supporting, maintaining, repairing if damaged, relocating and restoring all surface, subsurface or overhead structures and all other property including pipes, conduits, ducts, tubes, chambers and appurtenances, public or private in the vicinity of the work, except as otherwise specified.

ARTICLE 4 DRAWINGS AND SPECIFICATIONS

- (a) The intent of the Drawings and Specifications is that the Contractor shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the Work in accordance with the Contract Documents and all incidental work necessary to complete the Project in an acceptable manner ready for use, occupancy or operation by the Owner.

- (b) Figure dimensions on Drawings shall govern over scale dimensions, and detailed Drawings shall govern over general Drawings.
- (c) Any discrepancies found between the Drawings and Specifications and site conditions or any inconsistencies or ambiguities in the Drawings or Specifications shall be immediately reported to the Owner in writing who shall promptly correct such inconsistencies or ambiguities in writing. Work done by the Contractor after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the Contractor's risk and expense.

ARTICLE 5 ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

- (a) The Contractor may be furnished additional instructions and detail drawings by the Owner as necessary to carry out the Work required by the Contract Documents.
- (b) The additional drawings and instruction thus supplied will become a part of the Contract Documents. The Contractor shall carry out the Work in accordance with the additional detail drawings and instructions.

ARTICLE 6 INTERPRETATION OF DRAWINGS AND SPECIFICATIONS

The Contractor shall keep at the site of the work at least one copy of the Drawings and Specifications, and shall at all times give the Owner and his representatives access thereto. Anything shown on the Drawings and not mentioned in the Specifications, or mentioned in the Specifications and not shown on the Drawings, shall have the same effect as if shown or mentioned in both.

ARTICLE 7 WORK TO BE ACCOMPLISHED IN ACCORDANCE WITH
DRAWINGS AND SPECIFICATIONS

The work, during its progress and at its completion, shall conform to: the lines and grades shown on the drawings, to the specifications, and to the directions given by the Owner from time to time, subject to such modifications or additions as he shall determine to be necessary during the execution of the work; and in no case will any work be paid for in excess of such requirements.

ARTICLE 8 SHOP OR SETTING DRAWINGS

- (a) The Contractor shall submit promptly to the Owner five (5) copies of each shop or setting drawing prepared in accordance with the schedule predetermined as aforesaid. After examination of such drawings by the Owner and the return thereof, the Contractor shall make such corrections to the drawings as have been indicated and shall furnish the Owner with five corrected copies. If requested by the Owner the Contractor must furnish additional copies. Regardless of corrections made in or approval given to such drawings by the Owner, the Contractor will nevertheless be responsible for the accuracy of such drawings and for their conformity to the drawings and specifications, unless he notifies the Owner in writing of any deviations at the time he furnishes such drawings.

- (b) Shop drawings of all fabricated work shall be submitted to the Owner for approval and no work shall be fabricated by the Contractor save at his own risk until approval has been given.
- (c) The Contractor shall submit all shop and setting drawings on dates sufficiently in advance of requirements to enable the Owner ample time for checking same, including time for correcting, resubmission and recheck, if necessary, and no claim for delay will be granted the Contractor by reason of his failure in this respect.
- (d) All shop drawings submitted must bear the stamp of approval of the Contractor and reference conformance to the applicable section of the specifications, as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission. If the shop drawings show variations from the requirements of the Contract Documents because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment; otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract Documents even though such shop drawings have been approved.
- (e) Where shop drawings are submitted by the Contractor that indicate a departure from the contract which the Owner deems to be a minor adjustment in his interest and not involving a change in the contract price or extension of time, the Owner may approve the drawings, but the approval will contain, in substance, the following:

The modification shown on the attached drawings is approved in the interest of the Owner to effect an improvement for the project and is ordered with the understanding that it does not involve any change in the contract price or time; that it is subject generally to all contract stipulations and covenants and that it is without prejudice to any and all rights of the Owner under the contract and bond or bonds.
- (f) The approval of shop drawings will be general and shall not relieve the Contractor from the responsibility for adherence to the contract nor shall it relieve him of the responsibility for any error which may exist.
- (g) The Contractor agrees to hold the Engineers and the Owner harmless and defend them against damages of claims for damages arising out of injury to others or property of third persons which result from errors on shop, working or setting drawings whether or not the same have been approved by the engineers and/or the Owner.

ARTICLE 9 INDEMNIFICATION

To the fullest extent permitted by law, the Subcontractor shall hold harmless and indemnify the City of Pawtucket and the Pawtucket Water Supply Board (PWSB), and any other party the City of Pawtucket and the PWSB is contractually required to indemnify, from an against any and all claims, suits, liability, judgments, settlements, expenses, defense costs and/or attorney's fees, due to injury (including injury to the Subcontractor's employees), loss of any sort, or damage to any property, occasioned in whole or in part by any act or omission of the Subcontractor, its employees, agents, invitees, subcontractors of any tier, vendors, or material suppliers, regardless of whether or not it is contended that the party being indemnified contributed thereto by its own acts or omissions or was responsible therefore by reason of a non-delegable duty. Unless such indemnity is permitted by law, the obligation to indemnify shall not extend to that percentage of any judgment or settlement equal to the percentage of negligence found to be attributable to the party being indemnified; however, the Subcontractor shall indemnify for all remaining portions of any judgment or settlement.

To the fullest extent permitted by law, the Subcontractor shall defend each and every claim made against the City of Pawtucket and the PWSB and any other party the City of Pawtucket and the PWSB is contractually required to indemnify, for injury (including injury to the Subcontractor's employees), loss of any sort or damage to any property occasioned in whole or in part by any act or omission of the Subcontractor, its employees, agents, invitees, subcontractors of any tier, vendors, or material suppliers, regardless of whether or not it is contended that the party being indemnified contributed thereto by its own acts or omissions or was responsible therefore by reason of a non-delegable duty. The Subcontractor agrees to provide a defense to the City of Pawtucket and the PWSB and any other party the City of Pawtucket and the PWSB is contractually required to indemnify, with counsel of the defended party's choice, from the moment the claim is first asserted, regardless of whether the Subcontractor is ultimately required to indemnify the party under the preceding paragraph.

To the fullest extent permitted by law, the Subcontractor shall reimburse the City of Pawtucket and the PWSB and any other party the City of Pawtucket and the PWSB is contractually required to indemnify, for any cost or expenses, including but not limited to attorney's fees, expended in seeking the Subcontractor's compliance with the above stated duties to defend, indemnify and hold harmless.

ARTICLE 10 CONTRACTOR'S RESPONSIBILITY

- (a) The Contractor shall be conclusively presumed to be acquainted with all existing conditions and to guarantee that all work and materials shall, upon final completion of the work, be turned over to the Owner in a complete and perfect condition and he shall be responsible for the proper care, maintenance and protection of all work and materials until his entire contract is completed and all work and materials found in good condition and accepted. The Contractor will be held responsible for the entire work until completed and accepted by the Engineer and the Owner.

- b) It is understood that, except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, plant, water, light, power, traffic control, transportation, superintendence, temporary construction of every nature and all other services and facilities of every nature whatsoever necessary to protect, execute and complete the project within the specified time.

ARTICLE 11 CONTRACTOR'S TITLE TO MATERIALS

No material, supplies or equipment for the work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor warrants good title to all material, supplies and equipment installed or incorporated in the work and further warrants upon completion of all work to deliver the premises together with all improvements and appurtenances constructed or placed thereon by him to the Owner free from any claims, liens or charges or encumbrances and further agrees that neither he nor any person, firm or corporation furnishing any material or labor for any work covered by this contract shall have right to a lien upon the premises or any improvement or appurtenance thereon.

ARTICLE 12 INSPECTION AND TESTING OF MATERIALS

- (a) All materials and equipment used in the construction of the project shall be new and of current manufacture. Testing will be in accordance with accepted standards and as directed; the laboratory or inspection agency shall be selected by the Owner. Except as specified elsewhere in these specifications, the Contractor will pay for all testing and laboratory inspection.
- (b) All materials and workmanship shall be subject to inspection, examination and test by the Owner at any and all times during manufacture and/or construction and at any and all places where such manufacture and/or construction are carried on to establish conformance with these specifications and suitability for uses intended. Without additional charge, the Contractor shall furnish promptly all reasonable facilities, labor and materials necessary to make tests so required safe and convenient; he shall also furnish any mill, factory or such other tests based on the Standards and Tentative Standards of the American Society for Testing Materials as required by the Owner. Special full size and performance tests shall be as described in the specifications. A 7-day notification in writing stipulating the time and place where the manufacturing is to be done shall be given the Engineer prior to the commencement of manufacture of any materials in order that a representative of the Owner may be present, if so desired, to observe and inspect the operations.
- (c) It is expressly understood and agreed that the inspection of materials by the City and/or the Engineer will in no way lessen the responsibility of the Contractor or release him for his obligation to perform and deliver to the City, sound and satisfactory materials, or supplies. The contractor agrees to pay the cost of all tests of defective material, or

supplies or allow the cost to be deducted from any monies due him from the City.

ARTICLE 13 MATERIALS

- (a) All materials furnished and used in the completed work shall be new, unless otherwise specified, and of the best quality, workmanship and design, and recognized as standard in good construction practices. Whenever a specification number or reference is given, the subsequent amendments (if any) shall be included. The standards set forth in the selection of materials and supplies are intended to conform with those standards adopted by the Owner. Preference in manufacture shall be given to adopted standards and the Contractor shall further familiarize himself with the requirements of the Owner when the occasion or choice of materials or supplies so demands.
- (b) The materials used in construction shall be so disposed as not to endanger the work and so that full access may at all times be had to partly completed work and structures and they shall be so distributed as to cause no injury to those having access to the work or any of the units.
- (c) RIGL 37-2.1-3 (Domestic Steel) and P.L. 113-235 (the Consolidated and Further Continuing Appropriation Act 2015) are in effect for this project. Compliance with all provisions of the American Iron and Steel Requirements are in effect for this contract.

ARTICLE 14 "OR APPROVED EQUAL" CLAUSE

- (a) Whenever a material or article required is specified or shown on the drawings by using the name of the proprietary product or the name of a particular manufacturer or vendor, any material or article which will perform adequately the duties imposed by the general design, may be considered equal and satisfactory, providing the material or article so proposed is of equal substance and function in the Owner's opinion. It shall not be purchased or installed without his written approval. In all cases, new material shall be used in the project.
- (b) If one or more brands, makes of material, devices, or equipment are shown or specified, each should be regarded as the equal of the other. Any other brand, make of material, device or equipment which, in the opinion of the Owner or his authorized agent, is the recognized equal of that specified, considering quality, workmanship, and economy of operation and is suitable for the purpose intended, may be accepted.

ARTICLE 15 PATENTS

- (a) The Contractor shall hold and save the Owner and its officers, agents, servants and employees harmless from liability of any nature or kind, including cost and expenses for or on account of any patented or unpatented invention, process, article or appliance manufactured or used in the performance of the contract, including its use by the Owner.

- (b) License and/or royalty fees for the use of a process which is authorized by the Owner of the project must be reasonable and paid to the holder of the patent or his authorized license, direct by the Contractor.
- (c) If the Contractor uses any design, device or materials covered by letters, patent or copyright, he shall provide for such use by suitable agreement with the owner of such patented or copyrighted design, device or material.
- (d) It is mutually agreed and understood that, without exception, the contract prices shall include all royalties, license fees or costs arising from the use of such process, design, device or materials, in any way involved in the work. The Contractor and/or his Sureties shall indemnify and save harmless the Engineers and/or the Owner of the project from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with work agreed to be performed under this contract and shall indemnify the Engineers and/or the Owner for any cost, expense or damage which they may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after completion of the work.

ARTICLE 16 OTHER CONTRACTS

- (a) The owner reserves the right to do work by other contractors or by the Owner's forces and to permit public utility companies and others to do work during the progress and within the limits of or adjacent to the project, and the Contractor shall conduct his work and cooperate with such other parties so as to cause as little interference as possible with such other work. The Contractor agrees to make no claim against the Owner for additional payment due to delays or other conditions created by other operations of such other parties. If there is a difference of opinion as to the respective rights of the Contractor and others doing work, within the limits of or adjacent to the project, the Owner will decide as to the respective rights of the various parties involved in order to secure completion of the Owner's work in a satisfactory manner, and his decision shall be final and binding on the Contractor.
- (b) If any part of the work of the Contractor or any of his Subcontractors depends for proper execution, or results upon the work of any other Contractor, the Contractor will inspect and promptly give to the Engineer notice of any such defects in the work of such Contractor, as to render it suitable for such proper execution and results or of any delay by such other Contractor in the performance of his work. The failure of the Contractor to inspect and give notice shall constitute an acceptance by him (but not by the Owner) of the work of the other Contractor as fit and proper for the reception of his own work, except as to defects developing in the work of such other Contractor after the execution of the Contractor's work and an acknowledgment of the timely performance by such other Contractor of his work.

ARTICLE 17 COMPLETENESS OF WORK

In addition to the specified or described portions, all other work and all other materials, equipment and labor of whatever description which are necessary or required to complete the work, or for carrying out the full intent of the drawings and specifications, as interpreted by the Owner, such work, labor, materials and equipment shall be provided by the Contractor, and payment therefore shall be considered as having been included in the prices stipulated for the appropriate items of work as listed in the bid.

ARTICLE 18 CONTRACTOR TO CHECK DIMENSIONS AND SCHEDULES

The Contractor will be required to check all dimensions and quantities shown on the drawings or schedules given to him by the Owner, and shall notify the Owner of all errors therein which he may discover by examining and checking the same. The Contractor shall not take advantage of any error or omission in these specifications drawings or schedules. The Owner will furnish all instructions should such error or omission be discovered, and the Contractor shall carry out such instructions as if originally specified.

ARTICLE 19 REPRESENTATIONS OF CONTRACTOR: The Contractor represents and warrants:

- (a) That he is financially solvent and that he is experienced and competent to perform the type of work or furnish the materials, supplies or equipment to be performed or furnished by him; and
- (b) That he is familiar with all City, Federal, State, municipal and department laws, ordinances, orders and regulations which may in any way affect the work of those employed therein, including but not limited to any special acts relating to the work or to the project of which it is a part; and
- (c) That such temporary and permanent work required by the contract documents to be done by him can be satisfactorily constructed and used for the purpose for which it is intended, and that such construction will not injure any person or damage any property; and
- (d) That he has carefully examined the drawings, specifications and addendum (or addenda) if any, and the site of the work, and that from his own investigations, he has satisfied himself as to the nature and location of the work, the character, quality and quantity of surface and subsurface materials likely to be encountered, the character of equipment and other facilities needed for the performance of the work, the general and local conditions, and all other materials which may in any way affect the work or its performance; and
- (e) That he is aware of the hazards involved in the work and the danger to life and property both evident and inherent and that he will conduct the work in a careful and safe manner without injury to persons or property; and
- (f) That he can provide the necessary equipment, labor and materials to complete the contract work within the specified contract duration.

ARTICLE 20 INTERFERENCE WITH EXISTING STRUCTURES:

- a) Whenever it may be necessary to cross or interfere with existing culverts, drains, sewers, water pipes, guardrails, fences, gas pipes or other structures needing special care, due notice shall be given to the Owner, and the work shall be done according to his directions. Whenever required, all objects shall be strengthened to meet any additional stress that the work herein specified may impose upon it, and any damage caused shall be thoroughly repaired. If so directed by the Owner, the location of any existing work shall be changed to meet the requirements or appurtenances or the new work may be relocated, if necessary, to leave all in good working order. The entire work shall be the responsibility of the Contractor and the work shall be performed at no additional expense to the Owner.
- (b) The Contractor shall be responsible for all broken utilities encountered during the progress of the work and shall repair and be responsible for correcting all damages to existing utilities and structures at no additional expense to the Owner. The Contractor shall contact the proper utility or authority to correct or make any changes due to utility or other obstructions during the work of construction of the new work but the entire responsibility and expense shall be with the Contractor.
- (c) All damaged items of work or items required to be removed and replaced due to construction shall be replaced or repaired by the Contractor to the complete satisfaction of the property owner's and/or the Owner at no additional expense.

ARTICLE 21 EXISTING UTILITIES OR CONNECTIONS

- (a) The location of existing underground pipes, utilities, conduits and structures as shown has been collected from the best available sources and the Owner together with its agents does not imply nor guarantee the data and information in connection with underground pipes, utilities, conduits, structures and such other parts as to their completeness nor their locations as indicated. The Contractor shall assume that there are existing water, gas and other utility connections to each and every building en route, whether they appear on the drawings or not. Any expense and/or delay occasioned by utilities and structures or damage thereto, including those not shown, shall be the responsibility of the Contractor, at no additional expense to the Owner.
- (b) Before proceeding with construction operations, the Contractor shall notify the State of Rhode Island Utilities Underground Plant Damage Prevention System (DIG SAFE) at 1-888-344-7233, and shall make such supplemental investigations, including exploratory excavations, by hand digging, as he deems necessary to uncover and determine the exact locations of utilities and structures, and shall have no claims for damages due to encountering subsurface structures or utilities in locations other than shown on the drawings, or which are made known to the Contractor prior to construction operations. The Contractor shall

be responsible and liable for all damages to the existing utilities and structures.

ARTICLE 22 PROTECTION OF PERSONS AND PROPERTY

The Contractor shall conduct his work so as to interfere as little as possible with private business and public travel, and shall protect from damage all lawns, terraces, trees, curbs, gutters, flagging, crosswalks, water pipes, hydrants, electric light and telephone poles, waterstop cocks, manholes, gas pipes, conduits and other underground appurtenances on the line of the work and adjacent thereto, and at his own cost, unless particularly specified otherwise, repair or replace any of the aforementioned items which may become damaged or displaced at any time during the progress of the work. He shall, at his own expense, whenever necessary or required, maintain fences, install shoring, provide watchmen, maintain red lights, post danger signs warning against the hazards created by the construction work, as for example and without limiting the generality of the foregoing, open trenches, well holes and protruding nails, and he shall take such other precautions as may be necessary to protect life and property, and he shall be responsible for all damages occasioned in any way by his act or neglect, or that of his agents, employees or workmen.

ARTICLE 23 PROTECTION OF WORK AND PROPERTY - EMERGENCY

- (a) The Contractor shall at all times safely guard the Owner's property from injury or loss in connection with this contract. He shall at all times safely guard and protect his own work, and that of adjacent property, from damage. The Contractor shall replace or make good any such damage, loss or injury unless such be caused directly by errors contained in the contract or by the Owner, or his duly authorized representatives.
- (b) In case of an emergency which threatens loss or injury of property and/or safety of life, the Contractor will be allowed to act, without previous instructions from the Owner, in a diligent manner. He shall notify the Owner immediately thereafter. Any claim for compensation by the Contractor due to such extra work shall be promptly submitted to the Owner for approval. All such claims shall be fully documented with information regarding the nature of the emergency, the action taken in response to the emergency, costs associated with the response actions taken, etc. Photographs, witness statements, recordings and other such documentation material shall be provided if possible.
- (c) Where the Contractor has not taken action but has notified the Owner of an emergency threatening injury to persons or damage to the work or to any adjoining property, he shall act as instructed or authorized by the Owner.
- (d) The amount of reimbursement claimed by the Contractor on account of any emergency action shall be determined in the manner provided elsewhere in the contract documents.

ARTICLE 24 WATER

The water system is owned by the City of Pawtucket, and the Contractor shall be required to abide by all rules and regulations of the Pawtucket Water Supply Board. He shall arrange with the Pawtucket Water Supply Board for the operation of any existing valves and the metering and use of water for construction purposes. Any hose for water for construction purposes that is to be connected to a hydrant shall have a PWSB issued meter and a testable RP backflow device such as a Watts 009. (Refer to Article 47, Operation of Valves, of the Special Conditions)

ARTICLE 25 SUPERINTENDENCE AND WORKMEN

- (a) The employment of competent superintendents, foremen and experienced mechanics and laborers and others skilled in the particular duties entrusted to them will be required. Whenever the Engineer shall inform the Contractor or his representative in charge that any man on the job is incompetent or disorderly or is working contrary to the specifications or the instructions of the Engineer, or that the Engineer knows that the man has been incompetent or disorderly on this or any previous work, that man shall thereupon be immediately dismissed from the job and shall not be given employment on any work connected with the contract.
- (b) If requested, the Contractor shall deliver to the Engineer each week a record of the numbers, pay scale and classifications of men employed upon the project each day of the previous week.

ARTICLE 26 INSPECTION

The authorized representatives and agents of the Owner shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records.

ARTICLE 27 REPORTS, RECORDS AND DATA

The Contractor and each of his Subcontractors shall submit to the Owner such schedules of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the Owner may request concerning work performed or to be performed under this Contract.

ARTICLE 28 WEATHER CONDITIONS

In the event of temporary suspension of work, or during inclement weather, or whenever the Owner shall direct, the Contractor shall, and shall cause his Subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Owner, any work or material was damaged or injured by reason of failure on the part of the Contractor or any of his Subcontractors to protect his work, or otherwise damaged by the negligence of the Contractor, Subcontractors or their agents or servants, or is otherwise defective, such materials shall be removed and replaced at the expense of the Contractor.

ARTICLE 29 SUBLETTING

- (a) The Contractor is not to assign, transfer or sublet the contract in whole or in part to any other person or in any way to abridge the terms of the Contract Documents without written permission from the Engineer and express resolution of the Owner, but must keep it in his name and control until completed and accepted by the Engineer and the Owner. The Contractor shall likewise not assign any of the money payable under the contract. Approval by the Engineer and Owner of the subletting of any part of the work shall not, under any circumstances, relieve the Contractor or his Surety of any liabilities or obligations under the terms of his Contract Documents.
- (b) No subcontract will be approved by the Owner until evidence has been presented to the Owner that a Surety Bond will be supplied by the Subcontractor to cover the work performed and materials used in that particular subcontract.
- (c) Said bond shall be drawn in favor of the General Contractor and the Owner as joint obligee and shall recite the fact that the original contract has been entered into as well as the subcontract which the bond immediately covers.
- (d) Should any Subcontractor violate any of the terms of these specifications, the Owner may, at its option, require the Contractor to end and terminate such subcontract.
- (e) The Contractor shall be as fully responsible to the Owner for the acts and omissions of his Subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
- (f) The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind Subcontractors to the Contractor by the terms of the Contract and General Conditions and other contract documents insofar as applicable to the work of Subcontractors and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provisions of the contract documents.
- (g) Nothing contained in this contract shall create any contractual relation between any Subcontractor and the Owner.

ARTICLE 30 INSURANCES

General: The Contractor shall be responsible for maintaining insurance coverage in force for the life of this contract of the kinds in adequate amounts to secure all of his obligations under the contract and with insurance companies licensed to write such insurance in the State of Rhode Island. The kinds and amounts of such insurance carried shall not be less than the kinds and amounts designated herein, and the Contractor agrees that the stipulation herein of kinds and minimum amounts of insurance coverage or the acceptance by the Pawtucket Water Supply Board (PWSB) of certificates indicating the kinds

and limits of coverage shall in no way limit the liability of the Contractor to any such kinds and amounts of insurance coverage. All policies issued shall include as additional insured's the City of Pawtucket and the PWSB, their officers, directors, agents and employees as Additional Insured within their Commercial General Liability, Business Auto Liability, and Umbrella Liability coverage sections. The additional insured status shall be on a primary basis (with no right of contribution by any other coverage available to the additional insured's stated above).

The Contractor shall purchase and maintain insurance of the following types of coverage and limits of liability:

- (a) **Commercial General Liability** (CGL) with limits of Insurance of not less than \$1,000,000 each occurrence and \$2,000,000 Annual Aggregate.
- (1) If the CGL coverage contains a General Aggregate Limit, such General Aggregate shall apply separately to each project
 - (2) CGL coverage shall be written on ISO Occurrence form CG 00 01(12 07) or a substitute form providing equivalent coverage and shall cover liability arising from premises, operations, independent contractors, products-completed operations, and personal and advertising injury.
 - (3) The City of Pawtucket Water Supply Board shall be included as additional insured on the CGL, using ISO Additional Insured Endorsement CG 20 10 (11 85) or CG 2010 (07 04) **AND** CG 20 37 (07 04) or CG2033 (07 04) **AND** CG2037 (07 04) or an endorsement providing equivalent coverage to the additional insured. This insurance for the additional insured shall be as broad as the coverage provided for the named insured Contractor. It shall apply as primary and non-contributing insurance before any other insurance or self-insurance, including any deductible, maintained by, or provided to, the additional insured's as stated above.
 - (4) The Contractor shall maintain CGL coverage for itself and all additional insured's for the duration of the project and maintain Completed Operations coverage for itself and the PWSB as an additional insured for at least 3 years after completion of the Work.
- (b) **Automobile Liability**
- (1) Business Auto Liability with a combined single limit of at least \$1,000,000 each accident.
 - (2) Business Auto coverage must include coverage for liability arising out of all owned, leased, hired and non-owned automobiles.

(3) Additional insured status shall apply as stated above in the Article 30, Insurance, "General" section.

(c) Commercial Umbrella

(1) Umbrella limits must be at least \$ 3,000,000.

(2) Additional insured status shall apply as stated above in the Article 30, Insurance, "General" section.

(d) Workers Compensation and Employers Liability

(1) Employers Liability Insurance limits of at least \$500,000 each accident for bodily injury by accident and \$500,000 each employee for injury by disease.

(e) Owner's and Contractor's Protective Liability. The Contractor shall provide the City of Pawtucket and the PWSB an insurance policy written in the name of the City of Pawtucket and the PWSB, its board of directors, employees, servants and agents, to protect against and from any liability which might be incurred against them as a result of any operations of the Contractor or his Subcontractors or their employees. This Liability shall have limits of Insurance of not less than \$1,000,000 each occurrence and \$2,000,000 Annual Aggregate.

Prior to signing the contract agreement, the Contractor must supply a certificate of insurance evidencing the above requirements. This certificate and the insurance policies required by this section shall contain a provision that coverage afforded under the policies will not be canceled or allowed to expire until at least 30 days prior written notice has been given to the City of Pawtucket Water Supply Board. All insurance carriers must be an A.M. Best's "A" rated carrier or better with a financial size VII or better and licensed to do business in the State of Rhode Island. All the insurance specified in this contract shall be provided by the Contractor at no additional expense to the PWSB.

Waiver of Subrogation

The Contractor and its subcontractors and sub-subcontractors (and their insurance carriers) shall waive all rights of subrogation against the City of Pawtucket and the PWSB and their agents, officers, directors and employees for recovery of damages to the extent these damages are covered by commercial general liability, commercial umbrella liability, business auto liability, workers compensation and employers liability insurance maintained per requirements stated above.

ARTICLE 31 CONTRACT SECURITY

The contractor shall furnish four (4) copies of an executed Performance Bond in an amount equal to at least one hundred per cent (100%) of the contract price and an executed Payment Bond in an amount equal to at least one hundred percent (100%) of the contract price, as security for the payment of all persons performing labor on the project under this contract and furnishing materials, equipment and all other incidentals in connection with this contract. The Surety on such bonds shall be a duly authorized surety company satisfactory to the Owner and the cost of same shall be paid by the Contractor. Before final acceptance the bonds must be approved by the Owner.

ARTICLE 32 SUBSTITUTE BOND

If, at any time, the Contractor's Surety or Sureties, or the carriers of the other insurance herein specified to be written, become insolvent or, in a reasonable judgment of the Owner, become unsafe or unsound, then upon five days written notice from the Owner to the Contractor, the Contractor shall substitute such Performance, and Labor and Material Bonds, or insurance with such other Surety or carrier, and in such form as shall be satisfactory to the Owner. Any additional premium caused by such substitution shall be paid for by the Contractor. No further payments will be deemed due nor will be made until the new Surety or Sureties shall have furnished such an acceptable bond to the Owner.

ARTICLE 33 TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- (a) It is hereby understood and mutually agreed by and between the Contractor and the Owner, that the date of beginning and the time for completion as specified in the contract of the work to be done hereunder are ESSENTIAL CONDITIONS of this contract; and it is further mutually understood and agreed that the work embraced in this contract shall be commenced on a date to be specified in the "Notice to Proceed."
- (b) The Contractor agrees that said work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for the completion of the work described herein is a reasonable time for completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.
- (c) If the said Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or within any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay as liquidated damages to the Owner the amount specified in the contract, as herein before set forth, for each and every calendar day that the Contractor shall be in default after the time stipulated in the contract for completing the work.
- (d) The said amount is fixed and agreed upon by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event

sustain, and said amount is agreed to be the amount of damages which the Owner would sustain and said amount shall be retained by the Owner from current periodical payments.

- (e) It is further agreed that time is of the essence for each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this contract. Provided, that the Contractor shall not be charged with the liquidated damages or any excess cost when the delay in completion of the work is due:
- (1) To any preference, priority or allocation order duly issued by the Government, subsequent to date of contract.
 - (2) To unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including but not restricted to acts of God or of the public enemy, acts of the Owner, acts of another Contractor in the performance of a contract with Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather. There will be no time extension awarded for the winter shutdown period.
 - (3) To any delays of subcontractors or suppliers occasioned by any of the causes specified in subsections (1) and (2) of this article.

PROVIDED FURTHER, that the Contractor shall, within ten (10) days from the beginning of such delay, unless the Owner shall grant a further period of time prior to the date of final settlement of the contract, notify the Owner, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify the Contractor within a reasonable time of its decision in the matter.

ARTICLE 34 MUTUAL RESPONSIBILITY OF CONTRACTORS

If, through acts of neglect on the part of the Contractor, any other Contractor or any Subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other Contractor or Subcontractor by agreement or arbitration if such other Contractor or Subcontractor will so settle. If such other Contractor or Subcontractor shall assert any claim against the Owner on account of any damage alleged to have been sustained, the Owner shall notify the Contractor, who shall indemnify and save harmless the Owner against any such claim.

ARTICLE 35 CORRECTION OF WORK

All work, all materials, whether incorporated in the work or not, all processes of manufacture, and all methods of construction shall be at all times and places subject to the inspection of the Owner who shall be the final judge of the quality and suitability of the work, materials, processes of manufacture and methods of construction for the purposes for which they are used. Should they fail to meet his approval they shall be forthwith reconstructed, made good,

replaced and/or corrected, as the case may be, by the Contractor, at his own expense. Rejected material shall immediately be removed from the site. If, in the opinion of the Owner, it is undesirable to replace any defective or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the contract documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as in the judgment of the Owner shall be equitable.

ARTICLE 36 CHANGES IN PLANS AND SPECIFICATIONS

- (a) The Owner reserves the right to make changes in the plans or specifications or to increase or decrease the amount or quantity of the work at any time, before or after construction has commenced.
- (b) Except as hereinafter provided, no such change shall be binding upon the Contractor nor require the payment of additional compensation to the Contractor, unless it has been ordered in writing by the Engineer who has been especially authorized thereto in writing by the Owner pursuant to a resolution having been duly adopted by said Owner.
- (c) Except as hereinafter provided, no oral agreement, conversation or understanding between the Contractor and the Engineer or any inspector or any representative of the Owner, before or after the execution of the contract, shall affect or modify any of the terms or obligations of the Contract Documents or excuse the performance of any work in any manner contrary to the terms of the Contract Documents.
- (d) The Contractor shall, however obey any oral instructions of the Engineer which require no more than a change in the location, line or grade of pipes, manholes or other appurtenances, or an increase or decrease in the quantities of those items which are covered by unit prices in the proposal.
- (e) For any work performed by the Contractor pursuant to such oral instructions, payment will be made under the unit prices applicable to the work actually done and in accordance with the actual amount of such work done. If such oral instructions decrease the quantities or amount of work, no payment will be made to the Contractor to compensate him for any loss of anticipated profit on the work omitted.
- (f) If the Contractor does not concede that the unit prices in this proposal should be applicable to any work required to be performed under oral instructions of the Engineer he must notify the Engineer and clearly demonstrate that such unit prices will not apply and, in such case, the oral instructions of the Engineer shall not be effective unless confirmed in writing as herein above provided. If such instructions are confirmed in writing, the compensation to the Contractor shall be computed as for Extra Work at the discretion of the Engineer.
- (g) If the Contractor proceeds with the performance of any work in accordance with the oral instructions of the Engineer, it shall be conclusively presumed that the unit prices stated in the Contractor's proposal apply to such work and no additional or different compensation will be paid.

- (h) If any change in the plans or specifications are authorized in writing by the Owner, and at the discretion of the Engineer, the Contractor shall be paid therefore as provided in the section entitled Extra Work.

ARTICLE 37 EXTRA WORK

(A) The amount of compensation to be paid to the Contractor for any additional work required to be performed pursuant to any authorized written modification of the plans or specifications shall be determined on either of the following bases:

- (1) If any unit prices stated in the proposal are applicable to such work the Contractor shall be paid such unit prices.
- (2) The Engineer shall request the Contractor for a lump sum price for which he will do the work, and if the price is accepted by the Owner, then the Contractor will be paid such lump sum price. For work to be performed under a Lump Sum agreement the Contractor may apply a 10% allowance for overhead and profit against the net cost of work actually to be performed by him, except that in the event the change in work to be performed by him results in a net omission then no percentage for overhead and profit shall be allowed. The Contractor is permitted a 5% allowance to be applied against the net cost to a Subcontractor for work actually performed by the Subcontractor, but any change involving more than one Subcontractor, their net costs and/or net omissions shall be combined as one before consideration is given to the application of the 5% for the Contractor's overhead profit, and in the event the Contractor shows a net omission for the change as it affects the work actually to be performed by him, he is permitted only the 5% applied to the amount (if any) by which the net cost to the Subcontractor exceeds the net omission by the Contractor. For work to be performed by a Subcontractor the cost to the Owner may include the net cost to the Subcontractor plus an allowance of an amount not to exceed 10% of the net cost for the Subcontractor's overhead and profit except that in the event that the change in work results in a net omission for the Subcontractor there shall be no application of the 15% overhead and profit. Net cost to the Contractor and/or any Subcontractor shall be that defined in sub-section (3) of this article, but in every case taxes imposed by law upon labor employed at the site shall be excluded; and all credits which in the case of the Contractor shall include net omissions by the Subcontractor shall be deducted before the percentage can be applied. For the purpose of applying the provisions of this article, the Owner will not recognize other than a direct subcontractor of the Contractor nor permit the aggregate allowance to exceed 15% as applied above, to the net cost of work performed by any Subcontractor.
- (3) If the lump sum price proposed by the Contractor is not accepted by the Owner, the Contractor shall be paid in the following manner:
 - a) LABOR: For all labor and foreman in direct charge of the specific operations, the Contractor shall receive the rate of wage actually paid as shown by his certified payroll which shall be the prevailing

rate of wage (or scale) for each and every hour that said labor and foremen are actually engaged in such work.

No part of the salary or expenses of anyone connected with the Contractor's forces above the grade of foreman, and having general supervision of the work, will be included in the labor item as specified above.

The Engineer reserves the right to determine the number and type of labor employed.

The Contractor shall receive the actual costs paid to, or in behalf of, health and welfare benefits, pension fund benefits or other benefits when such amounts are required by collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work.

An amount equal to 15 percent of the sum of the above items will also be paid the Contractor.

- b) BOND, INSURANCE AND TAX: For property damage, liability, and workmen's compensation insurance premiums, unemployment insurance contributions and social security taxes on the extra work, the Contractor shall receive the actual cost, to which cost 6 percent will be added. The Contractor shall furnish satisfactory evidence of the rate or rates paid for such bond, insurance and tax.
- c) MATERIALS: For material accepted by the Engineer and used, the Contractor shall receive the actual cost of such materials delivered on the work site to which cost 15 percent will be added.

The Contractor will not be reimbursed for any penalty or carrying charge incurred due to late or delayed payment for materials used.

- d) EQUIPMENT: For any machinery or special equipment (other than small tools) including transportation cost, the use of which has been authorized by the Engineer, the Contractor shall receive either the prevailing rental rates or the actual documented cost plus an amount equal to 15% of the actual documented cost. Under no circumstance shall the payment exceed the replacement cost of the equipment.

All rental rates shall include the estimated operating cost as indicated for that equipment in the RENTAL RATE BLUE BOOK or the RENTAL RATE BLUE BOOK FOR OLDER EQUIPMENT. Operator's wages are not included in the estimated operating cost and are paid separately, except for certain equipment which may have the operator included.

The hourly rate shall apply when the equipment is specifically assigned to the work for a period of four hours or less.

The daily rate per hour shall apply when the equipment is specifically assigned to the work by the Engineer for a period of more than four hours and less than four consecutive working days.

The weekly rate per hour shall apply when the equipment is specifically assigned to the work by the Engineer for four consecutive working days or more but less than fifteen consecutive working days.

The monthly rate per hour shall apply when the equipment is specifically assigned to the work by the Engineer for fifteen consecutive working days or more.

The applicable hourly, daily, weekly, or monthly rate will be determined at the expiration of fifteen consecutive working days or upon release of the equipment, whichever occurs first. Interruption of the rental period, when equipment is used on other than assigned extra work, will not constitute a warrant for a rental rate applicable to shorter periods occasioned by such interruptions.

For rented equipment the cost shall be based on the actual documented cost plus an amount equal to 15% of the actual documented cost. The actual documented cost shall consist of the paid invoice for rented equipment plus other documented operating costs (i.e. fuel, maintenance, repairs, etc.).

The actual documented costs plus 15% of the actual documented costs shall not exceed the cost as calculated from the RENTAL RATE BLUE BOOK or the RENTAL RATE BLUE BOOK FOR OLDER CONSTRUCTION EQUIPMENT. The Contractor shall submit documentation for both the hourly rental rates and the actual documented cost to determine that the actual documented costs plus 15% does not exceed the calculated rental rate costs.

For equipment which is already on the project, the rental period shall start when ordered to work by the Engineer, and shall continue until ordered to discontinue by him.

For equipment which has to be brought to the project specifically for use on extra work, the PWSB will pay all loading and unloading costs, also all transportation costs to and from the project, including assembling and dismantling, provided, however, that the cost of return transportation shall not exceed that of moving the equipment to the project. Loading, unloading and transportation costs will not be paid if the equipment is used for work other than extra work while on the project. The rental period shall start at the time the equipment is ready for operations, and for that period of time the equipment is actually utilized in the extra work. The rental period shall end when the equipment is released by the Engineer.

All equipment, including trucks, shall, in the judgment of the Engineer, be in good working condition and fitting and suitable to the purpose intended, and the Engineer reserves the right to determine the number used. The manufacturer's model identification shall be the basis for identifying the type of equipment for payment purposes. Certification for the model year of the equipment will be required.

No percentage will be added to the "Blue Book rates" as prescribed herein by the PWSB for equipment. When the actual cost is used as the method of payment, an amount equal to 15% of the actual cost will be

added provided the total cost does not exceed the applicable cost as calculated from the RENTAL RATE BLUE BOOK or the RENTAL RATE BLUE BOOK FOR OLDER CONSTRUCTION EQUIPMENT.

- e) SUBCONTRACTOR COST: For work performed by a subcontractor, the Contractor shall accept as full payment therefore, an amount equal to the actual cost to the Contractor of such work performed by the subcontractor as determined by the Engineer, plus 10 percent of such cost. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.
- f) STATEMENTS: Statements shall be accompanied and supported by receipt Invoices for all materials. However, if materials used on the Extra work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the Invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from his stock, that the quantity claimed was actually used, and that the price claimed represents the actual cost to the Contractor.

- (B) It shall not constitute a change in the plans or specifications or order entitling the Contractor to extra compensation if the Engineer shall order changes or increase in plant or personnel to maintain the scheduled rate of progress in the work to be done under the contract.
- (C) If, in any part of the work done, the Contractor, without written order from the Engineer, uses material in excess of the amounts required by the plans and specifications, no payment for such excess will be allowed nor shall it be claimed.
- (D) Approval by the Engineer of materials or equipment substituted by the Contractor for those specified shall not be considered Extra Work.
- (E) No claim for extra work or cost will be allowed unless the same was done in pursuance of a written order of the Owner, as aforesaid, and this claim presented with the first estimate after the changed or extra work is done. When work is performed under the terms specified herein, the Contractor shall furnish satisfactory bills, payrolls and vouchers covering all items of cost and, when requested by the Owner, give the Owner access to accounts relating thereto.

ARTICLE 38 CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in form satisfactory to the Owner and conforming to additional requirements specified herein under SPECIAL CONDITIONS, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the contract documents and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule. The Contractor shall also furnish on forms to be supplied by the Owner: (a) a detailed estimate giving a complete breakdown of the contract price, and (b)

periodic itemized estimates of work done for the purpose of making partial payment thereon. The costs employed in making up any of these schedules will be used only for determining the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the contract price.

ARTICLE 39 PAYMENTS BY CONTRACTOR

The Contractor shall pay:

- (a) for all transportation and utility services not later than the 20th day of the calendar month following that in which services are rendered.
- (b) for all materials, tools and other expendable equipment to the extent of 95 percent of the cost thereof, not later than the 20th day of the calendar month following that in which such materials, tools and equipment are delivered at the site of the project, and the balance of the cost thereof not later than the 30th day following the completion of that part of the work in or on which such materials, tools and equipment are incorporated or used.
- (c) to each of his Subcontractors not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor an account of the work performed by his Subcontractors to the extent of such Subcontractor's interest therein.

ARTICLE 40 CONFORMANCE WITH DRAWINGS

The Owner may make alterations in the lines, grade, plan, form dimensions or materials of the work, or any part thereof, either before or after the commencement of construction. If such alterations diminish the quantity included in any item of work to be done and paid for at a unit price, the Contractor shall have no claim for damages or for anticipated profits on the work that thus may be dispensed with. If they increase the quantity included in any such item, such increase shall be paid for at the stipulated price.

ARTICLE 41 CHANGES IN THE WORK

(a) The Owner may at any time, as the need arises, order changes within the scope of the Work without invalidating the Agreement. If such changes increase or decrease the amount due under the Contract Documents, or in the time required for performance of the Work, an equitable adjustment shall be authorized by Change Order.

(b) The Owner also may at any time, by issuing a written Field Order, make changes in the details of the Work. The Contractor shall proceed with the performance of any changes in the Work so ordered by the Owner unless the Contractor believes that such Written Field Order entitles him to a change in Contract Price or Time or both in which event he shall give the Owner Written Notice thereof within seven (7) days after the receipt of the ordered change. Thereafter the Contractor shall document the basis for the change in Contract Price or Time within thirty (30) days. The Contractor shall not execute such changes pending the receipt of an executed Change Order or further instruction from the Owner.

ARTICLE 42 CHANGES IN CONTRACT PRICE

The Contract Price may be changed only by a Change Order. The value of any Work covered by a Change Order or of any claim for increase or decrease in the Contract Price shall be determined by one or more of the following methods in the order of precedence listed below:

- (1) Unit prices previously approved.
- (2) An agreed lump sum.
- (3) The actual cost of (a) Labor (b) direct overhead (c) materials, supplies, equipment, and other services necessary to complete the work.

To the cost of Subprograms 3 (above) there shall be an added fixed fee to be agreed upon but not to exceed fifteen (15) percent of the actual cost of the work to cover the cost of supervision, overhead bond, profit and any other general expenses. In the case of extra work done by Subcontractors, whether under the specific contract items provided herein, or if so approved by the Owner the fifteen (15) percent added to the reasonable cost of the work will be allowed to the Subcontractor. For such work, an additional 5 percent of the reasonable cost (before addition of the 15 percent) will be paid to the General Contractor for his work in directing the work of the Subcontractor and for any and all overhead involved. Wherever applicable, wholly or in part, the Owner reserves the right to apply the approved contract unit prices to any changes in the work as per Subprograms 1 above.

ARTICLE 43 PAYMENTS TO CONTRACTOR

(a) Not later than the 15th day of each calendar month the Owner shall make a progress payment to the Contractor on the basis of a duly certified and approved estimate of the work performed during the preceding calendar month under this contract, but, to insure the proper performance of this contract, the Owner shall retain five percent (5%) of the amount of each estimate until final completion and acceptance of all work covered by this contract.

(b) All material and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the Owner to require the fulfillment of all the terms of the contract.

(c) The Owner shall have the right to enter the premises for the purpose of doing work not covered by the Contract Documents. This provision shall not be construed as relieving the Contractor of the sole responsibility for the care and protection of the Work or the restoration of any damaged Work except such as may be caused by agents or employees of the Owner.

(d) Upon completion and acceptance of the Work, the Owner shall issue a certificate attached to the final payment request that the Work has been accepted by him under the conditions of the Contract Documents. The entire balance found to be due the Contractor, including the retained percentages but except such sums as may be lawfully retained by the Owner shall be paid to the Contractor.

(e)The Contractor will indemnify and save the Owner or the Owner's Representative harmless from all claims growing out of the lawful demands of Subcontractors, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, tools and all supplies incurred in the furtherance of the performance of the Work. The Contractor shall at the Owner's request furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged or waived.

If the Contractor fails to do so the Owner may, after having notified the Contractor, either pay unpaid bills or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed in accordance with the terms of the Contract Documents but in no event shall the provisions of this sentence be construed to impose any Surety, or any third party. In paying any unpaid bills of the Contractor, any payment so made by the Owner shall be considered as a payment made under the Contract Documents by the Owner to the Contractor and the Owner shall not be liable to the Contractor for any such payments made in good faith.

ARTICLE 44 ASSIGNMENTS

The Contractor shall not assign the whole or any part of this Contract or any monies due or to become due hereunder without written consent of the Owner. In case the Contractor assigns all or any part of any monies due or to become due under this Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due to the Contractor shall be subject to prior claims of all persons, firms or corporations for services rendered or materials supplied for the performance of the work called for in this Contract.

ARTICLE 45 ACCEPTANCE OF FINAL PAYMENT AS RELEASE

The acceptance by the Contractor of final payment shall be and shall operate as a release to the Owner of all claims and all liability to the Contractor other than claims in stated amounts as may be specifically excepted by the Contractor for all things done or furnished in connection with this work and for every act and neglect of the Owner and others relating to or arising out of this work. Any payment, however, final or otherwise, shall not release the Contractor or his sureties from any obligations under the contract Documents or the Performance and Payment.

ARTICLE 46 FINAL CERTIFICATE AND PAYMENT

Upon completion of the work in accordance with the contract and acceptance thereof by the Engineer, and the Owner, and as soon thereafter as practicable, the Engineer shall prepare a Final Certificate which shall certify the value of the work performed and materials furnished and the exact aggregate amount of the compensation to which the Contractor will become entitled under the terms of the contract. The Final Certificate shall be submitted to the Owner and a copy shall be furnished to the Contractor. Upon approval of the Final Certificate by the Owner, the Owner shall pay the Contractor an amount equal to the total compensation to which the Contractor is entitled for the performance of the total contract less the amount of all previous payments. Any payment, however, final or otherwise

shall not release the Contractor or his Sureties from any obligations under the Contract Documents or the Performance or Payment Bonds.

ARTICLE 47 ACCEPTANCE OF FINAL CERTIFICATE

The Contractor shall be conclusively deemed to have accepted the Final Certificate as a correct statement of the total liability of the Owner unless, within seven days after delivery of his copy of the Final Certificate to him, the Contractor shall return such copy to the Owner together with a statement of his objections to such Certificate and of any claim for damages or compensation in excess of the amount shown on the certificate. The acceptance by the Contractor of the Final Certificate approved by the Owner shall constitute a release and shall discharge the Owner from any further claims by the Contractor arising out of or related to the contract except the Contractor's claim for the balance of the compensation shown to be due on the Final Certificate.

ARTICLE 48 RIGHT TO WITHHOLD PAYMENTS

- (a) The Owner may withhold from the Contractor so much of any approved payments due him as may in the judgment of the Owner be necessary:
- (1) To assure the payment of any lien, stop notice or claim filed with the Owner for work, labor or materials done, performed or delivered and used in the prosecution of the work herein provided for (whether in strictly legal form or otherwise).
 - 2) To protect the Owner from loss due to defective work not remedied or through any improper or defective machinery, implements or appliances used by the Contractor or for failure of the Contractor to fully comply with any requirement of the contract, or
 - (3) To protect the Owner from loss due to injury to persons or damage to the work or property of other Contractors, Subcontractors or others caused by the act or neglect of the Contractor or any of his Subcontractors.
- (b) The Owner shall have the right to apply any amounts so withheld in such manner as the Owner may deem proper to satisfy such claims or to secure such protection. Such application of such money shall be deemed payments to the account of the Contractor.

ARTICLE 49 NOTICE OF WARNING

If the Contractor shall fail to make prompt payment to persons supplying labor or materials for the work, or refuse or fail to supply enough properly skilled workmen or proper materials, or refuse or fail to prosecute the work or any part thereof in accordance with the Contract Documents or with such diligence as will insure its completion within the period herein specified (or any duly authorized extension thereof) or fail to complete the work within said period or fail or refuse to regard laws, ordinances, codes, instructions of the Owner, then the Owner shall forward by registered mail to the Contractor at the address given in the contract, a Notice of Warning and in the event the Contractor fails to comply with said

Notice of Warning within five (5) days from receipt thereof, the Owner shall have the right to terminate the contract.

ARTICLE 50 TERMINATION OF CONTRACT: If,

- (a) The Contractor shall be adjudged bankrupt or make an assignment for the benefit of creditors, or
- (b) A receiver or liquidator shall be appointed for the Contractor or for any of his property and shall not be dismissed within twenty (20) days after such appointment, or the proceedings in connections therewith shall not be stayed on appeal within the said twenty (20) days, or
- (c) The Contractor shall abandon the work, or
- (d) The Contractor shall fail to make prompt payment to persons supplying labor or materials for the work after Notice of Warning from the Engineer, or
- (e) The Contractor shall refuse or fail, after Notice of Warning from the Engineer to supply enough properly skilled workmen or proper materials or proper workmanship, or shall unnecessarily or unreasonably delay the work, or
- (f) The Contractor shall refuse or fail after Notice of Warning from the Engineer to prosecute the work or any part thereof in accordance with the Contract Document, or
- (g) The Contractor shall refuse or fail after Notice of Warning from the Engineer to prosecute the work or any part thereof with such diligence as will insure its completion within the period herein specified (or any duly authorized extension thereof) or shall fail to complete the work within said period, or
- (h) The Contractor shall fail or refuse after Notice of Warning from the Engineer to regard laws, ordinances or the instructions of the Owner or Engineer or otherwise be guilty of a substantial violation of any provision of the contract, then and in such event, the Owner without prejudice to any other rights or remedy, may with seven (7) days Notice to the Contractor terminate the employment of the Contractor and his right to proceed either as to the entire work, or at the option of the Owner as to any portion thereof as to which delay shall have occurred, and may take possession of the work and such materials and supplies as may be on the site of the work and may complete the work by contract or otherwise, as the Owner may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the compensation to be paid the Contractor hereunder shall exceed the expense of so completing the work (including compensation for additional managerial, administrative, engineering and inspection services and any damages for delay) such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor and his Sureties shall be liable to the Owner for such excess.
- (i) The Owner is unable to complete the contract due to the inability to secure proper financing for the contract, or if other conditions warrant, the Owner may give written notice to the Contractor that the Contract is terminated.

In such event, the contractor shall be paid for the work completed to date, and all reasonable and documented costs associated with the completion of the contract to that date, excluding lost profits.

ARTICLE 51 PERMITS

The Contractor's attention is directed to any phase of the work wherein the authority for permits is vested in private companies, corporations or in Federal, State, County or municipal agencies. He shall familiarize himself with the procedure in securing such permits and approvals as are necessary and accept full responsibility for obtaining the same and unless otherwise specified pay the cost and expense thereof. The Contractor will be required to pay for permits issued by the Owner, the State Of Rhode Island, the City Of Pawtucket, the Town of Cumberland, Rhode Island, and any other permits as required. The Owner will cooperate with the Contractor to the extent reasonably required to facilitate obtaining permits and approvals.

ARTICLE 52 LAWS AND ORDINANCES

- (a) In the execution of the contract, the Contractor will be required to observe and obey all Federal, State, County and local laws, ordinances, codes and regulations relating to the performance of the Contract including but not limiting labor employed thereon, materials supplied, obstructing streets and highways, maintaining signals, storing, handling and use of explosives and all other general ordinances and State statutes affecting him or his employees or his work hereunder in his relations with the Municipality or any other persons, and also all laws, executing the work under the contract.
- (b) As a condition of the contract, the Contractor shall and does hereby agree to comply with all requirements of the labor laws of the State of Rhode Island.

ARTICLE 53 RELEASE OF PAYMENT AND PERFORMANCE BONDS

- (a) Within one year after the date of the issuance of the Final Certificate, the Owner shall make or shall cause to be made a reevaluation of the work. If the work shall be found satisfactory in accordance with the Contract Documents, the Owner shall approve the release of the Payment and Performance Bonds elsewhere provided for in these specifications.
- (b) In the event the inspection discloses the existence of defects in the materials or workmanship or other non-compliances with the Contract Documents, the Contractor shall be required to immediately make good and rectify all defects as a prerequisite to the release of the Performance and Payment Bonds. If the Contractor shall fail or neglect to satisfy the requirements of the Owner with respect to making the necessary corrections, then the Owner may proceed to have the work executed by others and charge the Contractor the cost thereby incurred.
- (c) The Contractor and his Sureties shall be liable to the Owner for making any corrections to the work as may be necessary by reason of defects including repairs of any damage to other parts of the system resulting from such defects.

- (d) The Performance Bond and Payment Bond shall remain in full force and effect through the guarantee period.

ARTICLE 54 RIGHT TO USE WORK

The Owner may enter upon and use the whole or any portion of the work which may be in condition to be used at any time previous to its final acceptance by the Owner. Such use shall not constitute or be evidence of acceptance by the Owner or the Engineer of the whole or any part of the material furnished or work performed under the contract.

ARTICLE 55 WORKING HOURS

Regular working hours shall consist of an 8-hour period established between 7:00 A.M. and 4:00 P.M. Work under the contract, other than maintenance work, shall not be prosecuted on Saturdays, Sundays or on Rhode Island State holidays, except in time of emergency, and then only under written permit from the Engineer, who shall be the judge as to the existence of the emergency.

If the Owner advises the Contractor that work outside of regular working hours is necessary to accommodate critical customers or to alleviate traffic problems, the Contractor will receive no extra payment, but compensation shall be considered as having been included in the prices stipulated for the appropriate items of work as listed in the bid.

If the Contractor desires to prosecute any portion of the work outside of regular working hours, he shall first obtain advance permission from the Engineer and the Owner. The Contractor shall provide ample time for this notification to allow the Engineer and the Owner time to procure an engineer or inspector for the work. In this case, the Contractor shall be responsible for payment of all overtime costs for personnel of the Owner associated with this work.

In case of night work, the lighting, safety and other facilities which are deemed necessary by the Owner for performing such night work shall be provided by the Contractor at no cost to the Owner.

ARTICLE 56 PROVISIONS REQUIRED BY LAW DEEMED INSERTED

- (a) Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, than upon the application of either party the contract shall forthwith be physically amended to make such insertion.
- (b) If this contract contains any unlawful provisions not an essential part of the general structure of the contract and which shall not appear to have been a controlling or material inducement in the making thereof, the same shall be deemed of no effect and shall be deemed stricken from the Contract without affecting the binding force of the remainder.

ARTICLE 57 WAIVER

- (a) Neither the inspection by the Owner or Engineer, or any of their employees, nor any order, measurement or certificate by the Engineer, nor any order by the Owner for the payment of any money, nor any payment for, or acceptance of the whole or any part of the work by the Engineer for the Owner nor any extension of time nor any possession taken by the Owner or its employees, shall operate as a waiver of any provision of this contract, or of any power herein reserved to the Owner, or any right to damages herein provided; nor shall any waiver of any breach of the contract constitute a waiver of any other or subsequent breach. Any remedy provided in this contract shall be construed as cumulative, that is, in addition to each and every other remedy herein provided.
- (b) No modification of this contract or waiver of any of its terms or provisions, except as herein provided, shall be made by or on behalf of the Owner, excepting by a resolution duly adopted by said Owner, and spread upon its minutes.

ARTICLE 58 ADDRESS

The address given in the proposal upon which this contract is founded is hereby designated as the place where notices, letters and other communications to the Contractor shall be mailed or delivered. The delivery at the above-named place, or the depositing in a postpaid wrapper directed to the above place, in any post office box, regularly maintained by the Post Office Department, of any notice, letter or other communication to the Contractor shall be deemed a sufficient delivery thereon to the Contractor. Such address may be changed at any time by an instrument in writing, executed and acknowledged by the Contractor, and delivered to the Owner. Nothing contained herein shall be deemed to preclude or render inoperative the delivery of any notice, letter or other communication to the Contractor personally.

ARTICLE 59 USE OF PREMISES AND REMOVAL OF DEBRIS

The Contractor expressly undertakes at his own expense:

- (a) To take every precaution against injuries to persons or damage to property.
- (b) To store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other Contractors.
- (c) To place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work.
- (d) To clean up daily, and as the work progresses, all refuse, rubbish, scrap materials, and debris caused by his operations, and to that end, render at all times the site of the work in a neat, unobstructed, unobtrusive, orderly, and workmanlike appearance. At no time will excess material or debris be permitted to remain in the road after work has been completed for the day.

- (e) Before final payment, to remove all surplus material, false work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, and to put the site in a neat, orderly condition. All cleanup materials shall be removed from the construction site, and deposited in a refuse disposal area by and at the expense of the Contractor.
- (f) To effect all cutting, fitting or patching of his work required to make the same conform to the drawings and specifications, and except with the consent of the Owner, not to cut or otherwise alter the work of any other Contractor.

ARTICLE 60 ESTIMATED QUANTITIES

- (a) The estimated quantities are given only for use in comparing bids and the Owner does not expressly or by implication represent that the final quantities will correspond therewith, but does call particular attention to the uncertainty in these quantities which cannot be determined in advance. The quantities required to complete the work contemplated under each contract may be substantially greater or substantially less than those given in the proposal. The actual quantities and cost of each contract can only be determined after the work is completed.
- (b) By submitting a proposal, a bidder shall indicate knowledge of and agreement that the quantities stated in the proposals may be substantially altered, added to, decreased or certain quantities eliminated, and such changes shall not give the Contractor any right to change the unit prices bid or claim loss of anticipated profits.

ARTICLE 61 RIGHT-OF-WAY AND SUSPENSION OF WORK

Land and rights-of-way for the purposes of this contract will be furnished by the Owner to the extent shown on the drawings; the Owner will use due diligence in acquiring said land and rights-of-way as speedily as possible. But it is possible that all lands and rights-of-way may not be obtained as herein contemplated before construction begins, in which event the Contractor shall begin his work upon such land and rights-of-way as the Owner may have previously acquired and no claim for damages whatsoever will be allowed by reason of the delay in obtaining the remaining lands and rights-of-way. Should the Owner be prevented or enjoined from proceeding with the work, or from authorizing its prosecution, either before or after the commencement, by reason of any litigation, or by reason of its inability to procure any lands or rights-of-way for the said work, the Contractor shall not be entitled to make or assert claim for damage by reason of said delay, or to withdraw from the contract except by consent of the Owner; but time for completion of the work will be extended to such time as the Owner determines will compensate for the time lost by such delay, such determination to be set forth in writing.

ARTICLE 62 MACHINERY AND EQUIPMENT

- (a) All machinery, equipment, trucks and vehicles used in the prosecution of the work or in connection therewith shall at all times be in proper operating condition.

- (b) Gasoline, electrical or diesel engines only shall be used for power in operating equipment.
- (c) The Contractor shall be responsible for curtailing noise, smoke, fumes or any other nuisance resulting from his operations. He shall, upon written notification from the Engineer, make any repairs, replacements, adjustments, additions and furnish mufflers when necessary to fulfill requirements.
- (d) All costs involved in complying with the stipulations outlined shall be included in the various prices bid in the proposal.

ARTICLE 63 GENERAL GUARANTY

- (a) The work under this contract, except as expressly excluded, and all of its subcontracts, severally and collectively, whether herein stipulated in each case or not, shall be guaranteed against faulty workmanship and/or material as specified below from date of acceptance of the work. The provisions of the guarantee and/or guarantees shall be incumbent on all parties of the work, including the General Contractor, each Subcontractor, all material supply houses and all manufacturers whose products and/or equipment is incorporated into the facilities.
- (b) Neither the final certificate of payment nor any provision in the contract documents, nor partial or entire occupancy of the premises by the Owner shall constitute an acceptance of work not done in accordance with the contract documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty workmanship or materials. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one (1) year from the date of final acceptance of the work unless a longer period is specified.
- (c) If, within one (1) year from the date of issuance of the Final Certificate, any portion of the work shall, in the opinion of the Owner, require repairing, replacing or rebuilding, the Contractor shall start such repairs within five (5) days after the receipt of notice from the Owner and if the Contractor shall fail or neglect to start such repairs within the said five (5) days, the Owner may employ such other person or persons as it may deem proper to make such and charge the Contractor the cost thereby incurred, provided nothing herein contained shall limit the liability of the Contractor or his Surety to the Owner for nonperformance of the Contractor's obligations at any time.
- (d) The Performance and Payment Bonds shall remain in full force and effect through the guarantee period.

ARTICLE 64 PROCEDURE IN CONSTRUCTION

- (a) The Contractor shall start work and carry it on at such point or points and in such order of precedence and at times and seasons as may be determined by the Owner, and shall complete the various parts of the work in accordance with the schedule approved by the Owner.

- (b) A complete organization, equipment and ample materials shall be on hand before actual work commences. In carrying on and executing the construction work, the Contractor shall so arrange his organization, plant, equipment and materials so that construction operations will be carried on continuously. The Contractor will not be permitted to reduce the force of men nor remove any equipment from the work if such reduction or removal impairs the progress of the work.
- (c) In the event the Owner awards more than one contract to the same Contractor, the Contractor will be required to prosecute the work on each contract simultaneously and will be required to maintain a separate and independent organization staff, labor forces and machinery on each contract in order to complete the work within the time set forth for the respective contracts.

ARTICLE 65 OTHER PROHIBITED INTERESTS

No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this contract in any part hereof. No officer, employee, architect, attorney, engineer or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any legislative, executive, supervisory or other similar function in connection with the construction of this project, shall become directly or indirectly interested personally in this contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

ARTICLE 66 OWNER'S AUTHORITY

The Owner shall give all orders and directions contemplated under this contract and specifications relative to the execution of the work. The Owner shall determine the amount, quality, acceptability and fitness of the several kinds of work and materials which are to be paid for under this contract and shall decide all questions which may arise in relation to said work and the construction thereof. The Owner's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said contract or specifications, the determination or decision of the Owner shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question. The Owner shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found obscure or be in dispute. Any differences or conflicts in regard to their work which may arise between the Contractor under this contract and other Contractors performing work for the Owner shall be adjusted and determined by the Owner.

ARTICLE 67 OWNER MAY STOP WORK

If the Work is defective, or Contractor fails to supply sufficient skilled workmen or suitable materials or equipment, the Owner may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated;

however, this right of the Owner to stop the Work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other party.

ARTICLE 68 LIENS

Neither the final payment nor any part of the retained percentage shall become due until the Contractor, if required, shall deliver to the Owner a complete release of all liens arising out of this contract, or receipts in full in lieu thereof, and if required in either case, an affidavit that so far as he had knowledge or information the releases and receipts include all the labor and material for which a lien could be billed; but the Contractor may, if any Subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Owner to indemnify him against any liens. If any liens remain unsatisfied after all payments are made, the Contractor shall refund to the Owner all monies that the latter may be compelled to pay in discharging such lien, including all costs and a reasonable attorney's fees.

ARTICLE 69 WORK SUBJECT TO CONTROL OF OWNER

- (a) In the performance of the work, the Contractor shall abide by all orders, directions and requirements of the Owner and shall perform all work to the satisfaction of the Owner; and at such times and places by such methods and in such manner and sequence as he may require. The Contractor shall employ no plant, equipment, materials, methods or men to which the Owner objects; and shall remove no plant, materials, equipment, or other facilities from the site of the work without the Owner's permission. Upon request, the Owner will confirm in writing any oral order, direction, requirement, or determination.
- (b) Inspectors shall be authorized to inspect all work done and material furnished. Such inspection may extend to all or any part of the work, and to the preparation or manufacture of the materials to be used. The presence or absence of any inspector shall not relieve the Contractor from any requirements of the Contract. In case of any dispute arising between the Contractor and the inspector as to materials furnished or the manner of performing the work, the inspector shall have the authority to reject material or suspend the work until the question at issue can be referred to and decided by the Owner. The inspector shall not be authorized to revoke, alter, enlarge, relax or release any requirement of these Specifications, nor to approve or accept any portion of the work nor to issue instructions contrary to the Drawings and Specifications. The inspector shall in no case act as foreman or perform other duties for the Contractor, or interfere with the management of work by the latter. Any advice which the inspector may give the Contractor shall in no way be construed as binding the Owner, or the Owner's Representative or the Engineer, in any way nor release the Contractor from the fulfillment of the terms of the Contract.

ARTICLE 70 OWNER'S CONTROL NOT LIMITED

In the articles of this contract, there are specific references in which the opinion, judgment, discretion or determination of the Owner shall control the work, and specific references to work that must be performed to the satisfaction of the

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|-----------------------------|---|
| ACI | American Concrete Institute |
| AGA | American Gas Association |
| AGMA | American Gear Manufacturers Association |
| AIEE (IEEE) | American Institute of Electrical Engineers (Institute of Electrical and Electronics Engineers, Inc.) |
| AISC | American Institute of Steel Construction |
| API | American Petroleum Institute |
| ANSI (USASI) | American National Standards Institute (formerly United States of American Standards Institute) |
| ASCE | American Society of Civil Engineers |
| ASHRAE | American Society of Heating, Refrigeration and Air Conditioning Engineers. |
| ASME | American Society of Mechanical Engineers |
| ASTM | American Society for Testing and Materials |
| AWWA | American Water Works Association |
| IBR | Institute of Boiler and Radiator Manufacturers |
| MCB | Master Car Builders |
| NBS | National Bureau of Standards |
| NBFU | National Board of Fire Underwriters |
| NEC | National Electrical Code, latest edition |
| NEMA | National Electrical Manufacturers Association |
| NEWWA | New England Water Works Association |
| NFPA | National Fire Protection Association |
| NSF | National Sanitation Foundation |
| SMACNA | Sheet Metal and Air Conditioning |
| FWQA (FWPCA) | Federal Water Quality Administration (formerly Federal Water Pollution Control Administration) |
| Federal Specification | Federal specifications issued by the Federal Supply Service of the General Services Administration, Washington, D. C. |
| 125-pound American Standard | |

United States of America Standard for cast-iron Pipe Flanges and Flange Fittings, Class 125, Designation B16.1-1967.

| | |
|-----------|---|
| AWG | American or Brown and Sharpe Wire Gauge |
| CS | Commercial Standard |
| EDR | Equivalent direct radiation |
| OS&Y | Outside screw and yoke |
| Stl.Wg. | U. S. Steel Wire, Washburn and Moen, American Steel and Wire Companies, or Roebling Gauge |
| USS gauge | United States Standard Gauge |
| WOG | Water, oil, gas |
| WSP | Water steam pressure |
| NPT | National Pipe Thread |

ARTICLE 73 SAFETY AND HEALTH REGULATIONS

These construction documents, and the joint and several phases of construction hereby contemplated are to be governed, at all times by applicable provisions of the Federal Law(s), including, but not limited to, the latest amendments of the following:

- (1) Williams-Steiger Occupational Safety & Health Act of 1970, Public Law 91-596;
- (2) Part 1910 - Occupational Safety and Health Standards; Chapter XVII of Title 29, Code of Federal Regulations;
- (3) Part 1518 - Safety and Health Regulations for Construction, Chapter XIII of Title 29, Code of Federal Regulations.

This project is subject to all of the Safety and Health Regulations (see 29 CFR 1518, as amended) as promulgated by the U. S. Department of Labor on April 17, 1971. Contractors are urged to make themselves familiar with the requirements of these regulations.

ARTICLE 74 TAXES

The Contractor's attention is called to the fact that certain taxes, including Federal, excise and/or Rhode Island Use Taxes are not applicable to City work. The City will execute exemption certificates, prepared by the Contractor, for the materials and equipment used in the work.

ARTICLE 75 WAGE RATES

- (a) All Bidders must comply with the State of Rhode Island requirements as to conditions of employment to be observed and prevailing wage rates to be paid under the contract as on file in the Rhode Island Department of Labor, Office of the Director. All terms, conditions and provisions of Chapters 12 and 13 of Title 37, General Laws of Rhode Island, 1956, as amended, shall apply to all bidders, and the provisions of said Chapters 12 and 13 of Title 37, General Laws of Rhode Island, 1956, as amended, are incorporated herein by reference thereto.
- (b) If, after the award of the contract, it becomes necessary to employ any person in a trade or occupation not classified in the above list, such person shall be paid at not less than a rate to be determined by the same authority which established the other wage rates for this contract. Such approved minimum rate shall be retroactive to the time of the initial employment of such person in such trade or occupation. The Contractor shall notify the Owner of his intention to employ persons in trades or occupations not classified in sufficient time for the Owner to obtain approved rates for such trades or occupations. The PWSB must contact the Department of Labor at <http://www.wdol.gov/agencies/whd/government-contracts/service-contracts/sf98/index.asp> and submit a request using e98 Online Request Form. Contracting officers may elect to use the e98 request form for any Service Contract Act - covered contract action. Also, if a contracting officer cannot obtain an appropriate SCA Wage Determination within the WDOL.gov database for use in an official contract action, the contracting officer must request an official SCA WD from DOL by completing the e98. Most requests are processed immediately. Some require research, and DOL may need additional time to respond.
- (c) The foregoing specified wage rates are minimum rates only, and the Owner will not consider any claims for additional compensation made by the Contractor because of payment by the Contractor of any wage rate in excess of the applicable rate contained in this contract. All disputes in regard to the payment of wages in excess of those specified in this contract shall be adjusted by the Contractor.
- (d) Except as may be otherwise required by law, all claims and disputes pertaining to the classification of labor employed on the project under this Contract shall be decided by the Owner's governing body or other duly designated official.

ARTICLE 76 ACCESS TO THE WORK

- (a) The Owner, agents and employees of the Owner may at all times enter upon the work and areas occupied by the Contractor and the Contractor shall provide safe and proper facilities for such entrance and for the inspection of the work.
- (b) The Contractor shall provide at all times proper facilities for access and inspection by representatives of the United States of America and the State of Rhode Island to all work under this project wherever it is in preparation or progress.

ARTICLE 77 SUBSURFACE STRUCTURES AND UTILITIES

- (a) Available information of the location of existing substructures and utilities has been collected from various sources but the results of the investigations shown on the drawings are not guaranteed to be accurate or complete.
- (b) The Contractor shall make all supplemental investigations including exploratory excavations, by hand digging, as he deems necessary to uncover and determine the exact locations of utilities and structures and shall have no claims for damages due to encountering subsurface structures or utilities in locations other than shown on the drawings, or which are made known to the Contractor prior to construction operations.

ARTICLE 78 ARBITRATION

- (a) All claims, disputes, and other matters in question arising out of or relating to this Contract or to the performance or interpretation thereof shall be submitted to arbitration. Arbitration shall be commenced by a demand in writing made by one (1) party to this Contract upon the other within a reasonable time after the dispute, claim, or other matter in question arose but in no event after payment in full of the contract price has been made and accepted. The written demand shall contain a statement of the question to be arbitrated and the name of the arbitrator appointed by the party. The other party to this Contract within ten (10) days of the receipt of the written demand shall appoint an arbitrator and give notice in writing thereof to the party who commenced arbitration. The two (2) arbitrators appointed by the parties shall within ten (10) days of the appointment of the second arbitrator select a third arbitrator who shall be designated as chairman and who immediately shall select a time, date and a place for hearing and give each party five (5) days in writing thereof. The date for the hearing shall not be more than fifteen (15) days after the appointment of the third arbitrator. The arbitrators shall render their award in writing not more than thirty (30) days after the date the hearing shall commence unless the parties shall otherwise agree in writing. In the event the party of whom arbitration is demanded shall fail to appoint his arbitrator within the time specified or the two (2) arbitrators appointed by the parties are unable to agree on an appointment of the third arbitrator within the time specified, either party may petition the Presiding Justice of the Superior Court of the State of Rhode Island to appoint a single arbitrator who shall hear the parties and make an award as provided herein. The petitioner shall give five (5) days notice in writing to the other party before filing his petition.
- (b) The award rendered by the arbitrators shall be final, and the judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.
- (c) Unless otherwise instructed in writing by the Owner, the Contractor shall carry out his obligations to perform under this Contract during any arbitration proceedings, and the Owner will continue to make payments to the Contractor in accordance with this Contract.

(d) All claims which are related to or dependent upon each other shall be consolidated and heard by the same arbitrator or arbitrators even though the parties are not the same.

ARTICLE 79 PRE-CONDITION SURVEY

Prior to the start of construction, a Pre-Condition Survey shall be conducted by the Contractor of all areas along the project corridor to document the preconstruction condition of manholes, catch basins, inlets, utility structures, pavements, guard rails, curbing, sidewalks, driveways and retaining walls, etc. This survey will assist in the identification of prior existing conditions and support the evaluation of possible damage claims that may arise throughout the duration of construction. The survey will require a photographic/video record to document the existing conditions along the City/Town Right-of-Way within the proposed project corridor to the satisfaction of the Owner. The completion of this Pre-Condition Survey along with the survey results (in the form of a digital file on a CD/DVD) shall be provided at no cost to the Owner.

ARTICLE 80 TRENCH COMPACTION TESTING

The Contractor shall be required to provide a certified third party testing lab acceptable to the Owner to complete field density compaction testing of backfill at a minimum of one location per street to be cleaned and lined or street where the water main is to be replaced. Field density compaction testing shall be performed in newly excavated water main trenches in accordance with Section 02211 titled "Earth Trench Excavation and Backfill" of the contract specifications. The completion of this compaction testing shall be provided at no cost to the Owner.

SECTION 00723
SPECIAL CONDITIONS

INDEX TO SPECIAL CONDITIONS

| <u>ARTICLE</u> | <u>TITLE</u> |
|----------------|---|
| 1----- | SCOPE OF WORK |
| 2----- | PROVISIONS FOR FLOW OF PRESENT DRAINAGE |
| 3----- | CONTRACTOR TO CHECK DIMENSIONS AND SCHEDULES |
| 4----- | PROTECTION OF CONSTRUCTION FEATURES |
| 5----- | PROTECTION OF LIVES AND HEALTH |
| 6----- | PROTECTION OF TREES |
| 7----- | HURRICANE PROTECTION |
| 8----- | FIRST AID TO INJURED |
| 9----- | CONFORMANCE WITH DIRECTIONS |
| 10----- | PROTECTION AGAINST HIGHWATER AND STORM |
| 11----- | SEQUENCE OF WORK |
| 12----- | COMPETENT HELP TO BE EMPLOYED |
| 13----- | STREETS AND SIDEWALKS TO BE KEPT OPEN |
| 14----- | LIGHTS, BARRIERS, FENCES, WATCHMEN AND INDEMNITY |
| 15----- | WORK OUTSIDE REGULAR HOURS |
| 16----- | BUS LINE INTERFERENCE |
| 17----- | WORK IN COLD WEATHER |
| 18----- | TUNNELING NOT PERMITTED |
| 19----- | RESERVED MATERIALS |
| 20----- | DISPOSAL OF MATERIALS, ACCESS TO HYDRANTS AND GATES, AND MATERIALS TRIMMED-UP FOR CONVENIENCE OF PUBLIC TRAVEL OR ADJOINING TENANTS |
| 21----- | LENGTH OF TRENCH TO BE OPENED, MAINTAINING PREMISES FREE FROM OBSTRUCTIONS, CROSS-OVERS, DIRECTIONAL SIGNS AND LIGHTS |
| 22----- | TURF, TOPSOIL AND OTHER REPLACED ITEMS |

- 23-----DEFECTIVE MATERIALS, INSPECTION AND TESTING OF MATERIALS
FURNISHED, SAMPLES AND ORDERING LISTS
- 24-----OFFICE FOR OWNER
- 25-----CONTRACTOR'S OFFICE AT THE PROJECT SITE
- 26-----SANITARY REGULATIONS
- 27-----SPIRITUOUS LIQUORS
- 28-----FINISHING AND CLEANING UP
- 29-----CLEAN-UP AT THE CONTRACTOR'S EXPENSE
- 30-----RIGHTS OF ACCESS
- 31-----WORK WITHIN THE LIMITS OF PRIVATE PROPERTY
- 32-----LOADING
- 33-----POLLUTION CONTROL
- 34-----COMPLETENESS OF WORK
- 35-----PLANK CROSSINGS
- 36-----DUST CONTROL
- 37-----CARE OF THE WORK
- 38-----CONSTRUCTION SCHEDULE
- 39-----WORK BY OTHERS
- 40-----CHANGES AND MODIFICATIONS
- 41-----FIRE PREVENTION AND PROTECTION
- 42-----SUPERINTENDENCE
- 43-----CERTIFICATES OF CONFORMANCE
- 44-----MATERIALS AND WORKMANSHIP
- 45-----WATER
- 46-----FITTING AND COORDINATION OF THE WORK
- 47-----OPERATION OF VALVES
- 48-----CONTROL OF LEAKAGE
- 49-----NOTIFICATION OF CUSTOMERS
- 50-----CONTRACTOR IDENTIFICATION CARDS

SECTION 00723

SPECIAL CONDITIONS

ARTICLE 1 SCOPE OF WORK:

The Contractor shall furnish all labor, materials, supplies, equipment and other facilities and services necessary or proper for, or incidental to, the work contemplated by this contract, as required by and in strict accordance with the Drawings, Specification and Addendum (or addenda), and/or with such changes as are ordered and approved pursuant to this contract. The Contractor shall perform all other obligations imposed on him by this contract, and shall be responsible for all materials delivered, and work performed, until completion and final acceptance. Upon completion of the contract, the project shall be presented, complete and undamaged.

ARTICLE 2 PROVISIONS FOR FLOW OF PRESENT DRAINAGE:

Provision for the flow of all sewers, drains and water courses that are met or altered during construction shall be provided by the Contractor and all the connections shall be restored without extra charge. All offensive matter shall be removed immediately with such precautions as may be required. If required, the Contractor shall install temporary bypass connections for surface or pipe drainage facilities to provide uninterrupted or continuous service during the time of construction. Whenever and wherever a temporary bypass is provided, an alternate means of bypass shall also be provided. The alternate bypass shall insure the continued flow of drainage in the event of failure of the initial bypass. Both methods of bypass shall be approved by the Owner and shall be provided by the Contractor at no additional expense to the Owner.

ARTICLE 3 CONTRACTOR TO CHECK DIMENSIONS AND SCHEDULES:

The Contractor will be required to check all dimensions and quantities shown on the drawings or schedules given to him by the Owner, and shall notify the Owner of all errors therein which he may discover by examining and checking the same. The Contractor shall not take advantage of any error or omission in these specifications, drawings and schedules. The Owner will furnish all instructions should such error or omission be discovered, and the Contractor shall carry out such instructions as if originally specified.

ARTICLE 4 PROTECTION OF CONSTRUCTION FEATURES:

The Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavements, utilities, adjoining property and such incidentals and to avoid damage thereto. The Contractor shall completely repair any damage caused by his operations at no additional expense to the Owner.

ARTICLE 5 PROTECTION OF LIVES AND HEALTH:

- (a) In order to protect the lives and health of his employees under the Contract, the Contractor shall comply with all safety provisions of applicable laws, building and construction codes and all pertinent

provisions of the "Manual of Accident Prevention in Construction" issued by the Associated General Contractors of America, Incorporated, and shall maintain an accurate record of all cases of death, occupational disease, and injury required medical attention or causing loss of time from work, arising out of and in the course of employment on work under this contract.

- (b) The Contractor alone shall be responsible for the safety, efficiency and adequacy of his plant, appliances and methods, and for any damage which may result from their failure or their improper construction, maintenance or operation.
- (c) The Contractor shall be solely responsible for the acts and omissions of his agents, employees and his subcontractor and their agents and employees and shall hold the Engineers and the Owner harmless and defend the Engineers and the Owner against damages or claims for damages arising out of injuries to other or property of others which result from said acts omissions.

ARTICLE 6 PROTECTION OF TREES:

The Contractor shall take special care to preserve and protect from injury all trees located along the lines of construction, and no such trees shall be cut down, trimmed or otherwise cut without permission from the Owner.

ARTICLE 7 HURRICANE PROTECTION:

Should hurricane warnings be issued, the Contractor shall take every practicable precaution to minimize danger to persons, to the work and to adjacent property. These precautions shall include closing all openings: removing all loose materials tools and/or equipment from exposed locations; and removing or securing scaffolding and other temporary work.

ARTICLE 8 FIRST AID TO INJURED:

The Contractor shall keep in his office ready for immediate use all articles necessary for giving first aid to injured employees. He shall also provide arrangements for the immediate removal and hospital treatment of any employee injured on the project who may require the same.

ARTICLE 9 CONFORMANCE WITH DIRECTIONS:

The Owner may make alterations in the lines, grade, plan, form, dimensions or materials to be used in project or any part thereof, either before or after the commencement of construction. If such alterations diminish the quantity included in any item of work, to be done and paid for at a unit price, the Contractor shall have no claim for damages or for anticipated profits on the work that thus may be dispensed with. If they increase the quantity included in any such item, such increase shall be paid for at the stipulated unit price.

ARTICLE 10 PROTECTION AGAINST HIGH WATER AND STORM:

- (a) The Contractor shall take all precautions to prevent damage to the work or equipment by high water or by storms. The Owner may prohibit the carrying out of any work at any time when in his judgment, high water or storm

conditions are unfavorable or not suitable, or at any time, regardless of the weather, when proper precautions are not being taken to safeguard previously constructed work or work in progress. No claim by the Contractor shall be made for lost time as a result of such shutdown by the Owner.

- (b) In case of damage caused by the failure of the Contractor to take adequate precautions, the Contractor shall repair or replace equipment damaged and shall make such repairs or rebuild such parts of the damaged work, as the Owner may require, at no additional expense to the Owner.

ARTICLE 11 SEQUENCE OF WORK:

The Contractor shall be required to prosecute his work in accordance with the construction schedule prepared by him in advance in accordance with additional requirements specified herein and approved by the Owner. This schedule shall state the methods and shall forecast the times for doing each portion of the work. Before beginning any portion of the work, the Contractor shall give the Owner advance notice and ample time for making the necessary preparations. The Owner reserves the right of final approval of the construction sequence.

ARTICLE 12 COMPETENT HELP TO BE EMPLOYED:

The Contractor shall employ experienced foremen, craftsmen and other workmen competent in the work in which they are to be engaged. All work shall be accomplished by able, skilled and competent personnel. If any person employed on the work by the Contractor shall appear to be incompetent or unreliable in any way, he shall be discharged immediately upon the request of the Owner and shall not again be employed on the work.

ARTICLE 13 STREETS AND SIDEWALKS TO BE KEPT OPEN:

- (a) The Contractor shall at all times keep the streets and sidewalks in which he may be at work open for pedestrian and vehicular traffic. If, in the opinion of the Owner, the interest of abutters and public requires it, the Contractor shall bridge or construct plank crossings over the trenches at street crossings, roads or private ways. The Contractor shall conduct his work for this objective in such manner as the Owner may direct from time to time. No sidewalk shall be obstructed where it is possible to avoid it. No additional payment shall be made to the Contractor for such work.
- (b) The Contractor shall provide all necessary Fire Crossings at principal intersection or ways usually traveled by fire apparatus with provisions for the apparatus so it can travel along the line of pipeline installations.
- (c) All work shall be conducted in such a manner as to provide minimum interference with existing business and commercial establishments. Such establishment shall be allowed to conduct business at all times during construction activities.
- (d) If, with the approval of the Engineer, a street requires closure to traffic, the Contractor is responsible for notifying the appropriate police and fire departments along with RIPTA if the street is on a bus route. All detours and road closures are to be approved by the Pawtucket Traffic Engineer.

ARTICLE 14 LIGHTS, BARRIERS, FENCES, WATCHMEN AND INDEMNITY:

- (a) The Contractor shall put up and maintain such barriers, fences, lighting and warning lights, danger-warning signals and signs as will absolutely prevent accidents during the construction work and protect the work and insure the safety of personnel and the public at all times and places; and the Contractor shall defend, indemnify and save harmless the Owner and the Engineers and their agents in every respect from any injury or damage whatsoever caused by any act, omission or neglect of the Contractor or his Subcontractor, or their servants or agents, including any claims arising out of failure to erect and maintain sufficient railing or fence. The fact that the Owner may retain control of the premises, or that it or its agents may take action to erect or maintain railings or fences shall not relieve the Contractor's obligations hereunder.
- (b) The Contractor at his own expense shall furnish, maintain and use, and cause all his Subcontractors to furnish, maintain and use all necessary safety devices and safe practices in prosecution of the work and to adopt, follow and maintain such additional safety measures as in the opinion of the Owner are conducive to safe operation by the Contractor and the Subcontractors. The Owner shall have the right to order any or all work suspended where, in the Owner's opinion, such work is not being carried on in a safe and proper manner, or where persons and property are not being properly protected or safeguarded and such work shall not be resumed until the Owner's requirements have been met and the Owner has directed that work be resumed. The work required by the preceding paragraph shall be totally at the Contractor's expense.
- (c) In addition to the above, when and as necessary, or when required by the Owner, the Contractor shall post signs and employ watchmen, flagmen, or police officers for the direction of traffic at the site and for excluding at all times unauthorized persons from the project. The Contractor will not be paid additional compensation for this work, except that payment will be made under the Schedule of Bid Items for providing police for direction of traffic.
- (d) The Contractor shall be responsible for excluding at all times from lands within easement areas, all persons not directly connected with the work or authorized by the Owner to be within the project areas.

ARTICLE 15 WORK OUTSIDE REGULAR HOURS:

Night work or work on Saturdays, Sundays or legal holidays requiring the presence of an engineer or inspector, will not be permissible except in case of emergency, and only upon the approval of the Owner. Should it be desired or required by the Owner to operate an organization for continuous night work or for emergency night work, the lighting, safety and other facilities which are deemed necessary by the Owner for performing such night work shall be provided by the Contractor. For night work, work on Saturdays, Sundays or legal holidays, if any be performed, the Contractor will receive no extra payment, but compensation shall be considered as having been included in the prices stipulated for the appropriate items of work as listed in the bid.

ARTICLE 16 BUS LINE INTERFERENCE

Whenever it may be necessary to interfere with any bus lines, notice shall be given to the corporation owning the same, and reasonable time shall be given to said corporation to arrange the schedule for operation of same, as may be necessary.

ARTICLE 17 WORK IN COLD WEATHER:

- (a) The Owner will determine when conditions are unfavorable for work and may order the work or any portions of it suspended whenever, in his opinion, the conditions are not such as will insure first class work. In general, work shall be prosecuted throughout the year and the Contractor will be expected to keep work going and employment of labor as continuous as possible.
- (b) All methods and materials used in the performance and for the protection of the work in cold weather shall be subject to the approval of the Owner. The Contractor shall take necessary precautions to protect the work from damage and for removing ice and frost from materials, including heating and water, sand and coarse aggregate and for protecting the newly laid masonry. The Contractor will receive no extra payment for any labor, apparatus, tools or materials necessary to comply with the above requirements, but compensation shall be construed to be included in the prices stipulated for the appropriate items of work as listed in the bid.

ARTICLE 18 TUNNELING NOT PERMITTED:

Tunneling will not be permitted without the consent of the Owner.

ARTICLE 19 RESERVED MATERIALS:

Materials found on the work suitable for any special use shall be reserved for that purpose. Where permitted, the Contractor may use in the various parts of the work, without charge therefor, any materials taken from the excavations.

ARTICLE 20 DISPOSAL OF MATERIALS, ACCESS TO HYDRANTS AND GATES, AND MATERIALS TRIMMED-UP FOR CONVENIENCE OF PUBLIC TRAVEL OR ADJOINING TENANTS:

The materials from the trenches and excavations and those used in the construction of the work shall be deposited in such a manner so they will not endanger persons or the work, and so that free access may be had at any time to all hydrants and gates in the vicinity of the work. The materials shall be kept trimmed-up so as to be of as little inconvenience as possible to the public travel or the adjoining tenants. All excavated materials not approved for backfill and fill, all surplus material and all rock, boulders resulting from the excavations, and all existing piping removed from the trench during excavations shall be removed and satisfactorily disposed of off the site by the Contractor at no additional expense to the Owner. At no time is there to be debris of any kind left overnight on the jobsite.

ARTICLE 21 LENGTH OF TRENCH TO BE OPENED, MAINTAINING PREMISES FREE FROM OBSTRUCTIONS, CROSS-OVERS, DIRECTIONAL SIGNS AND LIGHTS:

- (a) The length of trench opened at any time, from point where ground is being broken to completed backfill shall not exceed **75** feet and also the amount of space in streets or public and private lands occupied by equipment, trench and supplies, shall not exceed the length or space considered reasonably necessary and expedient by the Owner. In determining the length of open trench or spaces for equipment, materials, supplies and other necessities, the Owner will consider the nature of the lands or streets where work is being done, types and methods of construction and equipment being used, inconvenience to the public or to the private parties, possible dangers and other proper matters. All work must be constructed with a minimum of inconvenience and danger to the public and all other parties concerned.
- (b) Whenever any trench obstructs pedestrian and vehicular traffic in or to any public street, private driveway or property entrance, or to private property, the Contractor shall take such means as may be necessary to maintain pedestrian and vehicular traffic and access. Until such time as the work may have attained sufficient strength to support backfill, or if for any other reason it is not expedient to backfill the trench immediately, the Contractor shall construct and maintain suitable plant crossings and bridges to carry essential traffic in or to the street, driveway or property in question as specified or directed.
- (c) Suitable signs, lights and such required items to direct traffic shall be furnished and maintained by the Contractor.
- (d) The Contractor must keep streets and premises free from unnecessary obstructions, debris and all other materials. The Owner may, at any time, order all equipment, materials, surplus from excavations, debris and all other materials lying outside that length of working space promptly removed, and should the Contractor fail to remove such material within 24 hours after notice to remove the same, the Owner may cause any part or all of such materials to be removed by such persons as he may employ, at the Contractor's expense, and may deduct the costs thereof from payments which may be or may become due to the Contractor under the contract. In special cases, where public safety urgently demands it, the Owner may cause such materials to be removed without prior notice.

ARTICLE 22 TURF, TOPSOIL AND OTHER REPLACED ITEMS:

Where work is performed through cultivated or sodded lands, the Contractor shall stockpile the turf and topsoil separately and replace the same after the trench is filled, leaving the land as near as possible to its original condition. Trees, fences, walls, walks and such other items must not be damaged.

ARTICLE 23 DEFECTIVE MATERIALS, INSPECTION AND TESTING OF MATERIALS FURNISHED, SAMPLES AND ORDERING LISTS:

- (a) No materials shall be laid or used which are known, or may be found to be in any way defective. Notice shall be given to the Owner of any defective or

imperfect material. Defective or unfit material found to have been laid shall be removed and replaced by the Contractor with sound and unobjectionable material without additional expense to the Owner.

- (b) All materials furnished by the Contractor are subject to thorough inspections and tests by the Owner.
- (c) The Contractor shall submit samples as required by the Owner of the various materials used on the contract for testing purposes.
- (d) All ordering lists shall be submitted by the Contractor to the Owner for approval and shall be approved before the ordering of the materials.

ARTICLE 24 OFFICE FOR OWNER:

An office for the Owner is not required for this project.

ARTICLE 25 CONTRACTOR'S CONSTRUCTION OFFICE AND YARD AT THE PROJECT SITE:

The Contractor is required to establish and maintain during the performance of this contract, a suitable temporary construction office located convenient to the project site that includes adequate area for storage of equipment and construction materials. The location of this site shall be subject to the approval of the Owner. This approval shall be obtained from the Owner prior to entering into a contract or lease for use of the proposed site. Additionally, the Superintendent or his authorized agent shall be responsible to maintain a neat and orderly area at all times while the work is in progress.

All costs associated with obtaining and maintaining a suitable temporary construction office and storage yard site shall be paid for at the lump sum bid for "Mobilization and Demobilization" as listed in the Bid Proposal, which shall constitute full compensation for moving in personnel, equipment, materials and other incidentals, continuous maintenance of the site, moving out personnel, equipment and unused materials, restoration and clean-up of entire site at the conclusion of the contract work. At mobilization, the Contractor shall install a State Revolving Fund site sign as shown in Appendix C of this specification and remove the sign at the conclusion of the contract work. This item of work shall be measured for payments as follows:

- a. Initial Payment - The first payment shall be for 50 percent of the lump sum bid price for Mobilization and Demobilization and will be paid on the first progress payment.
- b. Final Payment - The second and final payment shall be for the remaining 50 percent of the lump sum bid price for Mobilization and Demobilization and will be paid on the final progress payment.

ARTICLE 26 SANITARY REGULATIONS:

- (a) Adequate sanitary conveniences for use of workmen on the premises, properly secluded from public observation, shall be provided and maintained by the Contractor in accordance with the requirements of local and State health authorities and in such manner and at such points as shall be approved and

their use shall be strictly enforced. Sanitary waste shall be treated and disposed of in a manner satisfactory to and as directed by the Owner and the local and State health authorities; under no circumstances shall sanitary wastes be allowed to flow on the surface of the ground.

ARTICLE 27 SPIRITUOUS LIQUORS:

The Contractor shall neither permit nor suffer the introduction or use of spirituous liquors, dope or drugs of any kind or description unless ordered by a physician upon the work embraced in this contract.

ARTICLE 28 FINISHING AND CLEANING UP:

As the work progresses, in completing the backfilling of the trenches, the Contractor shall replace all surface material to the satisfaction of the Owner, and shall then immediately remove all surplus material, temporary water service piping and all tools and other property belonging to him, leaving the entire street and surrounding work areas free and clean and in an unobstructed and unobtrusive order, at no additional expense to the Owner. The backfilling, and removing of surplus materials, temporary piping, tools, etc., shall follow closely upon the completion of the work each day. The Contractor shall exercise special care in keeping rights-of-way and private and public lands, upon which work is to be performed, clean and free of debris at all times, and to remove tools and other property belonging to the Contractor when they are not being used. Before the work will be considered complete, the Contractor shall thoroughly clean the installed pipelines of all dirt and other debris, and shall leave the pipelines in a first class condition ready for use.

ARTICLE 29 CLEAN UP AT CONTRACTOR'S EXPENSE:

In case the Contractor shall fail or neglect, after backfilling, to promptly remove all surplus materials, temporary water service piping, tools and other incidentals; or to promptly clean any area of the work so directed by Owner to be cleaned, or to promptly do the required repaving when ordered, the Owner may, after 24 hours notice, cause the work to be done by others, and the cost thereof shall be deducted from any moneys then or thereafter due the Contractor.

ARTICLE 30 RIGHTS OF ACCESS:

Nothing herein contained or shown on the drawings shall be construed as giving the Contractor exclusive occupancy of the work areas involved. The Owner or any other Contractor employed by him, the various utility companies, Contractors or subcontractors employed by the Federal, State or local government agencies or other utility firms or agencies involved in the general project or upon public rights-of-way, may enter upon or cross the area of work or occupy portions of it as directed or permitted. When the territory of one contract is the convenient means of access to the other, each contractor shall arrange his work in such manner as to permit such access to the other and prevent unnecessary delay to the work as a whole.

ARTICLE 31 WORK WITHIN THE LIMITS OF PRIVATE PROPERTY:

- (a) Particular attention is hereby directed to the fact that some of the work included under this contract may have to be done within the limits of properties that are State-owned and privately owned. The Owner has, or will, secure the necessary limited temporary or permanent easements for construction purposes. The Contractor will be permitted to use the areas of the Owner's easements, subject to all conditions and requirements as they may affect the Contractor's operations and the work of this contract and the Contractor shall conduct his operations and activities in the performance of the work under this contract in accordance with all such conditions and requirements and such additional requirements as may be imposed by the Owner.
- (b) All means and rights of ingress and egress to the work areas and all areas required for work space shall be the entire responsibility of the Contractor and all costs in connection therewith shall be considered to be included in the prices stipulated for the appropriate items of work as listed in the bid; the Contractor shall not use nor occupy public or private lands outside the limits of the Owner's easements and rights-of-way unless permits in writing have first been obtained by the Contractor from the owners of the public and/or private land and copies of such permits filed with the Owner. The Contractor shall be responsible for cooperating with and for coordinating the prosecution of the work of his contract with State and private property owners. Any abuse to lands of State or private owners shall be immediately corrected by the Contractor at his expense to the complete satisfaction of the owners and such precautionary or preventive measures as required by the Owner shall be taken or made to prevent further additional nuisances, interference or inconvenience to the abutting owners.
- (c) It shall be the Contractor's full responsibility to familiarize himself with the limitations imposed on the work of construction within the various properties of State or private ownership and rights-of-way by the existing occupancy or use. To this end, he will be required to make every effort to fully and satisfactorily protect trees, shrubs, lawns, gardens, fences, walks, driveways, structures and all and any other appurtenances of the property owners. In addition, he shall provide adequate access to all walks, driveways, yards or structures; protect all work by the erecting or placing safety guards or barriers, lights and such other incidentals; and where required, the Contractor shall construct temporary plank crossings or timbers to permit full use of private facilities at all times, at no additional expense to the Owner. All other applicable provisions for control of work within the areas of public travel set forth elsewhere herein shall also apply to work within the limits of private ownership.
- (d) The Contractor shall cooperate with State and private property owners and shall also contact the Owner for additional information regarding the requested (or required) length of time needed as a notice to be given to the State and private property owners before the Contractor enters the State or privately owned property in order to start the construction work. In some cases, a certain time to start the work and a certain limited length of time may be required by the State and private property owners for any shutdowns or construction operations so the work of the Contractor will not interfere with the operations of the State or private property owners.

- (e) No separate payment will be made for the requirements specified under "WORK WITHIN THE LIMITS OF PRIVATE PROPERTY" and all costs in connection therewith shall be included in the prices stipulated for the appropriate items of work as listed in the bid.

ARTICLE 32 LOADING:

No part of the structures involved in this contract shall be loaded during construction with a load greater than is calculated to carry with safety. Should any accidents or damage occur through any violation of this requirement, the Contractor will be held responsible under his contract and bond.

ARTICLE 33 POLLUTION CONTROL:

Special care shall be taken to prevent contamination or muddying up or unduly interfering with the stream flows, impounded waters of any ponds, or other bodies of water along the line of work. No waste matter of any kind will be allowed to discharge into the stream flows or impounded waters of any ponds or other bodies of water.

ARTICLE 34 COMPLETENESS OF WORK:

In addition to the specified or described portions, all other work and all other materials, equipment, and labor, of whatever description, which are necessary or required to complete the work or to carry out the full intent of the Drawings and Specifications, shall be provided by the Contractor, and payment therefor shall be considered as having been included in the prices stipulated for the appropriate items of work listed in the bid.

ARTICLE 35 PLANK CROSSINGS:

As required or directed by the Owner, the Contractor shall install at selected locations suitable plank or timber crossings substantially built and reinforced to sustain vehicular traffic across trench or other excavations. Crossings shall be constructed with passable approaches for use by the traveling public, private property owners or fire fighting equipment. No separate payment will be made for this work but the cost shall be included in the prices stipulated for the appropriate items of work as listed in the bid.

ARTICLE 36 DUST CONTROL:

The Contractor shall exercise every precaution and means to prevent and control dust arising out of all construction operations from becoming a nuisance to abutting property owners or surrounding neighborhoods. Pavements adjoining the pipe trenches shall be kept swept off daily and washed clean of excess trench material wherever and whenever directed. Earth piles along trenches, earth stockpiles and surfaces of refilled trenches shall be kept moist at all times, and treated with calcium chloride or other suitable dust-laying agent, as directed by the Engineer. No extra payment will be made for providing the dust control measures and conforming to the requirements specified above, but compensation therefor shall be considered to be included in the prices stipulated for the appropriate items of work as listed in the bid.

ARTICLE 37 CARE OF THE WORK:

The Contractor shall be responsible for all damages to persons or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all material delivered and work performed until completion and final acceptance, whether or not the same has been covered by partial payments made by the Owner. All valid claims for damage arising from the contractor's work is the sole responsibility of the contractor and all such claims shall be promptly submitted to the contractor and/or his insurance carrier.

ARTICLE 38 CONSTRUCTION SCHEDULE:

In addition to other requirements specified and within ten (10) days after notice to proceed, the Contractor shall confer with the Owner for the purpose of drafting a construction schedule satisfactory to the Owner which is to include all the work of this contract. The schedule shall be submitted on or before the Preconstruction Conference. The Contractor shall perform the work of this contract to conform to the construction schedule, as approved by the Owner, except the Owner reserves the right to amend and alter the construction schedule, as approved, at any time, in a manner which it deems to be in the best interests of the Owner so to do. The Contractor shall arrange his work under this contract to conform with the construction schedule as it may be revised from time to time by the Owner, at no additional expense to the Owner. The Contractor shall notify the Owner immediately of any circumstances which may affect the performance of the work in accordance with the current construction schedule.

ARTICLE 39 WORK BY OTHERS:

The Owner reserves the right to do any other work which may connect with, or become a part of, or be adjacent to the work embraced by this contract, at any time, by contract work or otherwise. The Contractor shall not interfere with or obstruct in any way the work of such other persons as the Owner may employ, and shall execute his own work in such manner as to aid to the executing of work by others as may be required. No backfilling of trenches or excavations will be permitted until such work by the Owner is completed.

ARTICLE 40 CHANGES AND MODIFICATIONS:

The Owner reserves the right to delete or cancel any item or items or parts thereof as listed in the bid, without recourse by the Contractor. The Owner also reserves the right to add to any item or part thereof and listed in the bid. The compensation to be paid the Contractor for such additional extension, appurtenances or item shall be made under the applicable items as listed in the bid. Where no applicable items are provided in the bid for such additional extension, appurtenance or item, the compensation to be paid the Contractor shall be as set forth under the article entitled "CHANGES IN THE WORK" of the GENERAL CONDITIONS.

ARTICLE 41 FIRE PREVENTION AND PROTECTION:

- (a) All Federal laws (Occupational Safety and Health Act) and all State and municipal rules and regulations with respect to fire prevention, fire-resistant construction and fire protection shall be strictly adhered to and all work and facilities necessary therefor shall be provided and maintained by the Contractor in an approved manner.
- (b) All fire protection equipment such as water tanks, hoses, pumps, extinguishers and other materials and apparatus shall be provided for the protection of the contract work, temporary work and adjacent property. Trained personnel experienced in the operation of all fire protection equipment and apparatus shall be available on the sites whenever work is in progress and at such other times as may be necessary for the safety of the public and the work.
- (c) Open fires will not be permitted.

ARTICLE 42 SUPERINTENDENCE:

During the entire duration of the project, the Contractor shall employ a competent Superintendent, in personal charge of the work, who shall have full authority to act for the Contractor. The Superintendent is to be available at all times at the Project Site on a daily basis for the duration of the project. This person shall be continued in this capacity full time for this project unless (1) he ceases to be on the Contractor's payroll or (2) he proves himself to be unacceptable to the Owner. Instructions given to the Superintendent and/or his supervisory subordinates shall be considered as given to the Contractor. A chain-of-command listing shall be submitted and adhered to in the temporary absence of the superintendent. The Contractor shall provide the Superintendent, the night emergency person and/or other responsible supervisors who shall be on the job site and on call at all times with a cellular telephone (with a **local area code** that is without long distance charges to callers from Pawtucket) at no additional cost to the Owner. The Engineer shall be provided with the respective numbers to have the ability to be in constant 24hr/7days contact with the contractor's personnel on the project site or in case of an emergency.

ARTICLE 43 CERTIFICATES OF CONFORMANCE:

In addition to other requirements specified herein, the Contractor shall furnish to the Owner, in the manner as directed, notarized certificates of conformance for all materials to be furnished under this contract. The notarized certificates of conformance shall state that the material to be furnished under this contract meets the specification requirements. When directed, each shipment of material shall be accompanied by the manufacturer's notarized certificates of conformance, certifying that the materials meet the requirements of the specifications. Unless otherwise specifically specified, all testing of materials shall be provided by the Contractor at no additional expense to the Owner.

ARTICLE 44 MATERIALS AND WORKMANSHIP:

All workmanship, equipment, material and articles incorporated in the work covered by this contract are to be of the best grade of their respective kinds for the purpose. The Contractor shall furnish to the Owner for his approval the name of

the manufacturer of machinery, mechanical and other equipment which he contemplates installing, together with their respective performance capacities and other pertinent information. When required by the specifications, or when called for by the Owner, the Contractor shall furnish the required information for approval of all the material or articles which he contemplates incorporating in the work. Samples of material shall be submitted for approval when and as directed. Machinery, equipment, material and articles installed or used without such approval shall be at the risk of subsequent rejection.

ARTICLE 45 WATER:

The Contractor shall provide and maintain facilities for an adequate supply of water suitable for use for construction purposes and for domestic use as required for the work of this contract. All work, materials, equipment, appurtenances and accessories necessary for providing supplies of water at the site and including the cost of all water used, shall be borne by the Contractor. Upon completion of the work of this contract, and before final acceptance, the Contractor shall remove all temporary piping and appurtenant work used for temporary water supply. Temporary water supply work shall be provided in accordance with the requirements of the local water department and health authorities. All temporary piping and hoses shall be ANSI/NSF approved for contact with drinking water. The Contractor shall be responsible for providing all necessary water for construction purposes and for domestic use.

ARTICLE 46 FITTING AND COORDINATION OF THE WORK:

The Contractor shall be responsible for the proper fitting of all work and for the coordination of all operations of all trades, subcontractors or materialmen engaged upon the work. The Contractor shall be prepared to guarantee to each of his subcontractors the dimensions which they may require for the fitting of their work to all surrounding work, and shall do, or cause his agents to do, all cutting, fitting, adjusting and patching necessary to make the several parts of the work come together satisfactorily and properly and to fit the work to receive or be received by the work of other contractors.

ARTICLE 47 OPERATION OF VALVES:

The Contractor will not be permitted to operate valves in the existing water supply system except to assist the PWSB in an approved emergency situation. The Contractor shall notify the Engineer for the Pawtucket Water Supply Board of any desired valve operations required for the work of this Contract at least 48 hours in advance, and the Owner shall furnish all necessary personnel to operate any such valve(s) as needed, without cost to the Contractor.

ARTICLE 48 CONTROL OF LEAKAGE:

In the operation of gate valves, for the purpose of shutting down where connections are to be made to existing water mains, the Owner does not guarantee or imply that shutdowns will be completely effective in shutting off the flow of water into open ends. While the Owner will make every effort to control or reduce the leakage through the closed gates to a minimum, the Contractor will be required to provide the necessary pumps or other equipment or means required to handle or divert the leakage flows sufficiently to permit proper or good workmanship in making the

connections, at no additional expense to the Owner. Work stoppages because of inadequate dewatering pumps is not grounds for separate compensation to the contractor.

ARTICLE 49 NOTIFICATION OF CUSTOMERS:

Before any mains are shutdown, the Engineer shall ascertain the customers to be affected by the shutdown, and shall notify each at least **24** hours in advance and again just prior to the shutdown. The PWSB accepts responsibility of notifying all customers to be affected by a scheduled water main shutdown.

In cleaning and lining projects, the Contractor shall notify customers in writing at least **24** hours in advance for any work that requires home or business entry. In particular the work involved with the connection of temporary by-pass service or the blow back to clean existing service connections.

ARTICLE 50 CONTRACTOR IDENTIFICATION CARDS:

Any of the Contractor's employees whose work will be on private property or will have direct contact with customers shall be required to display a company photo identification card along with a PWSB identification card. The ID cards shall be displayed on their person at all times and shall be clearly visible when having contact with PWSB customers. The PWSB identification card shall be supplied by the PWSB.

DIVISION ONE-GENERAL REQUIREMENTS

INDEX TO GENERAL REQUIREMENTS

| <u>SECTION</u> | <u>TITLE</u> |
|----------------|--|
| 01041----- | PROJECT COORDINATION |
| 01045----- | CUTTING AND PATCHING |
| 01152----- | APPLICATION FOR PAYMENT |
| 01153----- | CHANGE ORDER PROCEDURES |
| 01340----- | SHOP DRAWINGS, PRODUCT DATA AND SAMPLES |
| 01410----- | TESTING LABORATORY SERVICES |
| 01500----- | TEMPORARY YARD, FIELD OFFICE, AND FACILITIES |
| 01570----- | TRAFFIC CONTROL |
| 01576----- | PROTECTION OF TRAFFIC, PERSONS, AND PROPERTY |
| 01600----- | MATERIAL AND EQUIPMENT |
| 01700----- | CONTRACT CLOSEOUT |
| 01710----- | CLEANING |

SECTION 01041-PROJECT COORDINATION

PART 1-GENERAL

1.01 SINGLE CONTRACT RESPONSIBILITY

The work included in these contract documents is to be performed under the responsibility of a single prime contract. The Contractor is responsible for the coordination of all the work, whether performed by its own personnel or its subcontractors, and will maintain such procedures as necessary to keep its workmen and suppliers informed of project progress so as not to unnecessarily delay completion of the work.

PART 2-PRODUCTS

Not Used

PART 3-EXECUTION

Not Used

END OF SECTION

SECTION 01045 - CUTTING AND PATCHING

PART 1-GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Contractor shall be responsible for all cutting, fitting and patching, including attendant excavation and backfill, required to complete the Work or to:
1. Make its several parts fit together properly
 2. Uncover portions of the Work to inspect completed work or to provide for installations of ill-timed work.
 3. Remove and replace defective work.
 4. Remove and replace work not conforming to requirements of Contract Documents.
 5. Remove samples of installed work as specified for testing.

1.02 RELATED REQUIREMENTS

- A. Section 02211: Earth Trench Excavation and Backfill.
- B. Section 02513: Pavement Restoration
- C. Section 02713: Installation of Water Pipeline Systems.

1.03 SUBMITTALS

- A. Submit a written request to the Owner well in advance of executing any cutting or alteration which affects.
1. Work of the Owner or any separate contractor.
 2. Structural value or integrity of any element of the Project.
 3. Efficiency, operational life, maintenance or safety of operational elements.
- B. Request shall include:
1. Identification of the Project.
 2. Description of affected work.
 3. The necessity for cutting, alteration or excavation.
 4. Description of proposed work:
 - a. Scope of cutting, patching, alteration, or excavation.

- b. Trades who will execute the work.
 - c. Products proposed to be used.
5. Alternatives to cutting and patching.
6. Cost Proposal, when applicable.
- C. Should conditions of Work or the schedule indicate a change of products from original installation, Contractor shall submit request for substitution.
- D. Submit written notice to Owner designating the date and the time the work will be uncovered.

PART 2-PRODUCTS

2.01 MATERIALS

- A. Comply with specifications and standards for each specific product involved.

PART 3-EXECUTION

3.01 INSPECTION

- A. Inspect existing conditions of Project, including elements subject to damage or to movement during cutting and patching.
- B. After uncovering work, inspect conditions affecting installation of Products, or performance of work.
- C. Report unsatisfactory or questionable conditions to the Owner in writing; do not proceed with work until the Owner has provided further instructions.

3.02 PREPARATION

- A. Provide adequate temporary support as necessary to assure structural value or integrity of affected portion of Work.
- B. Provide devices and methods to protect other portions of project damage.
- C. Provide protection from elements for that portion of the Project which may be exposed by cutting and patching work, and maintain excavations free from water.

3.03 PERFORMANCE

- A. Execute cutting and demolition by methods which will prevent damage to other work, and will provide proper surfaces to receive installation of repairs. All asphalt to be removed for work must be neatly sawcut,

jackhammered to a clean edge, ground out with an asphalt zipper, or cut with a cutting wheel. Ripping and tearing out of existing asphalt with a backhoe for excavations is not permitted.

- B. Execute excavating and backfilling methods which will prevent settlement or damage to other work.
- C. Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances and finishes.
- D. Restore work which has been cut or removed; install new products to provide completed Work in accord with requirements of Contract Documents.
- E. The Contractor assumes complete responsibility for any temporary or permanent patch for a period of one year after installation. Upon notification of a trench or patch failure, the contractor shall respond, remedy, and repair the situation in a timely manner to the satisfaction of the Engineer. In the event of an unsafe roadway condition, the Contractor shall also respond immediately with the appropriate barricades, barrels, drums, cones, or signs to ensure public safety.

END OF SECTION

SECTION 01152 - APPLICATION FOR PAYMENT

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Submit Applications for Payment to the Owner in accordance with the schedule established by Conditions of the Contract and Agreement between Owner and Contractor.

1.02 RELATED REQUIREMENTS

- A. Agreement Between Owner and Contractor: Lump Sum or Unit Prices.
- B. Conditions of the Contract: Progress payments, Retainages, and Final Payment.
- C. Section 01700: Contract Close-out.

1.03 FORMAT AND DATA REQUIRED

- A. Submit itemized applications typed on forms approved by the Owner.

1.04 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT

A. Application Form:

1. Fill in required information, including that for Change Orders executed prior to the date of submittal of the application.
2. Fill in summary of dollar values to agree with respective totals indicated on continuation sheets.
3. Execute certification with signature of a responsible officer of Contract firm.

B. Continuation Sheets:

1. Fill in total list of all scheduled component items of Work, with item number and scheduled dollar value for each item.
2. Fill in dollar value in each column for each scheduled line item when work has been performed.
4. List each Change Order executed prior to the date of submission, at the end of the continuation sheets.
 - a. List by Change Order number, and description, as for an original component item of work.

1.05 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

- A. When the Owner or the Engineer requires substantiating data, Contractor shall submit suitable information, with a cover letter identifying:
 - 1. Project.
 - 2. Application number and date.
 - 3. Detailed list of enclosures.
- B. Submit one copy of data and cover letter for each copy of application.

1.06 PREPARATION OF APPLICATION FOR FINAL PAYMENT

- A. Fill in Application form as specified for progress payments.
- B. Use continuation sheet for presenting the final statement of accounting as specified in Section 01700 - Contract Close-out.

1.07 SUBMITTAL PROCEDURE

- A. Submit Applications for Payment to the Owner at the times stipulated in the Agreement on a monthly basis.
- B. Number: Three copies of each Application as required by the Owner.
- C. When the Owner finds Application properly completed and correct, he will process certificate for payment to Contractor.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01153 - CHANGE ORDER PROCEDURES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Promptly implement the change order procedures.
 - 1. Provide full written data required to evaluate changes.
 - 2. Maintain detailed records of work done on a time-and-material/force account basis.
 - 3. Provide full documentation to the Owner on request.
- B. Designate in writing the member of Contractor's organization:
 - 1. Who is authorized to accept changes in the work.
 - 2. Who is responsible for informing others in the Contractor's employ of the authorization of changes in the Work.
- C. Owner will designate in writing the person who is authorized to execute Change Orders.

1.02 RELATED REQUIREMENTS

- A. Agreement: The amount of established unit prices.
- B. Conditions of the Contract:
 - 1. Methods of determining cost or credit to Owner resulting from changes in Work made on a time and material basis.
 - 2. Contractor's claims for additional costs.
- C. Section 01152: Applications for Payment.
- D. Section 01600: Materials and Equipment.

1.03 DEFINITIONS

- A. Change Order: See General Conditions.
- B. Construction Change Authorization, AIA Document G713: A written order to the Contractor, signed by Owner and Engineer, which amends the Contract Documents as described, and authorizes Contractor to proceed with a change which affects the Contract Sum or the contract Time, for inclusion in a subsequent Change Order.
- C. Architect's supplemental Instructions, AIA document G710. A written order, instructions, or interpretations, signed by the Engineer making

minor changes in the Work not involving a change in the Contract Sum or Contract Time.

1.04 PRELIMINARY PROCEDURES

- A. Owner or Engineer may initiate changes by submitting a Proposal Request to Contractor. Request will include:
 - 1. Detailed description of the Change, Products, and location of the change in the Project.
 - 2. Supplementary or revised Drawings and Specifications.
 - 3. The projected time span for making the change, and a specific statement as to whether overtime work is or is not, authorized.
 - 4. A specific period of time during which the requested price will be considered valid.
 - 5. Such request is for information only, and is not an instruction to execute the changes, nor to stop work in progress.
- B. Contractor may initiate changes by submitting a written notice to Owner, containing:
 - 1. Description of proposed changes.
 - 2. Statement of the reason for making the changes.
 - 3. Statement of the effect on the Contract Sum and the Contract Time.
 - 4. Statement of the effect on the work of separate Contractors.
 - 5. Documentation supporting any change in Contract sum or contract time as appropriate.

1.05 CONSTRUCTION CHANGE AUTHORIZATION

- A. In lieu of Proposal Request, the Owner may issue a construction change authorization for Contractor to proceed with a change for subsequent inclusion in a change order.
- B. Authorization will describe changes in the work, both additions and deletions, with attachments of revised Contract Documents to define details of the change, and will designate the method of determining any change in Contract Time.
- C. Owner and Engineer will sign and date the Construction Change Authorization as authorization for the Contractor to proceed with the changes.
- D. Contractor may sign and date the Construction Change Authorization to indicate agreement with the terms therein.

1.06 DOCUMENTATION OF PROPOSALS AND CLAIMS

- A. Support each quotation for a lump-sum proposal, and for each unit price which has not previously been established, with sufficient substantiating data to allow Engineer to evaluate the quotation.
- B. On request provide additional data to support time and cost computations:
 - 1. Labor required
 - 2. Equipment required.
 - 3. Products required.
 - a. Recommend source of purchase and unit costs.
 - b. Quantities required.
 - 4. Taxes, insurance, and bonds.
 - 5. Credit for work deleted from Contract, similarly documented.
 - 6. Overhead and profit.
 - 7. Justification for any change in Contract Time.
- C. Support each claim for additional costs, and for work done on a time-and-material/force account basis, with documentation as required for a lump-sum proposal, plus additional information:
 - 1. Name of the Owner's authorized agent who ordered the work, and the date of the order.
 - 2. Dates and times work was performed, and by whom.
 - 3. Time record, plus summary of hours worked, and hourly rates paid.
 - 4. Receipts and invoices for:
 - a. Equipment used, listing dates and times of use.
 - b. Products used, listing of quantities.
 - c. Subcontracts.
- D. Document requests for substitutions as specified in section 01600.

1.07 PREPARATION OF CHANGE ORDERS

- A. Owner or Engineer will prepare each change order.
- B. Form: Change Order: AIA Document G701.

- C. Change Order will describe changes in the Work, both additions and deletions, with attachments of revised contract documents to define details of the change.
- D. Change order will provide an accounting of the adjustment in the Contract Sum and the Contract Time.

1.08 LUMP-SUM/FIXED PRICE CHANGE ORDER

- A. Content of Change Orders will be based on, either:
 - 1. Owner's or Engineer's Proposal Request and Contractor's responsive Proposal as mutually agreed between Owner and Contractor.
 - 2. Contractor's Proposal for a change, as recommended by the Engineer.
- B. Owner and Engineer will sign and date the Change Order as authorization for the Contractor to proceed with the changes.
- C. Contractor may sign and date the Change Order to indicate agreement with the terms therein.

1.09 UNIT PRICE CHANGE ORDER

- A. Content of Change Orders will be based on, either:
 - 1. Owner's or Engineer's definition of the scope of the required changes.
 - 2. Contractor's Proposal for a change, as recommended by the Owner or Engineer
 - 3. Survey of completed work.
- B. The amounts of the unit prices to be:
 - 1. Those stated in the Agreement.
 - 2. Those mutually agreed upon between Owner and Contractor.
- C. When quantities of each of the items affected by the Change Order can be determined prior to start of the work:
 - 1. Owner and Engineer will sign and date the Change Order as authorization for Contractor to proceed with the changes.
 - 2. Contractor may sign and date the change order to indicate agreement with the terms therein.
- D. When quantities of the items cannot be determined prior to start of the work:

1. Engineer or Owner will issue a construction change authorization directing Contractor to proceed with the change on the basis of unit prices, and will cite the applicable unit prices.
2. At completion of the change, Owner or Engineer will determine the cost of such work based on the unit prices and quantities used.
 - a. Contractor shall submit documentation to establish the number of units of each item and any claims for a change in Contract Time.
3. Engineer or Owner will sign and date the Change Order to establish the change in Contract Sum and in Contract Time.
4. Owner and Contractor will sign and date the Change Order to indicate their agreement with the terms therein.

1.10 TIME AND MATERIAL/FORCE ACCOUNT CHANGE ORDER/CONSTRUCTION CHANGE AUTHORIZATION

- A. Engineer and Owner will issue a Construction Change Authorization directing Contractor to proceed with the changes.
- B. At completion of the change, Contractor shall submit itemized accounting and supporting data as provided in the Article "Documentation of Proposals and Claims" of this Section.
- C. Engineer will determine the allowable cost of such work, as provided in General Conditions and Supplementary Conditions.
- D. Engineer or Owner will sign and date the Change Order to establish the change in Contract Sum and in Contract Time.
- E. Owner and Contractor will sign and date the Change Order to indicate their agreement therewith.

1.11 CORRELATION WITH CONTRACTOR'S SUBMITTALS

- A. Periodically revise Request for Payment forms to record each change as a separate item of Work, and to record the adjusted Contract Sum.
- B. Periodically revise the Construction Schedule to reflect each change in Contract Time.
 1. Revise subsidies to show changes for other items of work affected by the changes.
- C. Upon completion of work under a Change Order, enter pertinent changes in Record Documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01340 - SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Submit Shop Drawings, Product Data and Samples required by Contract Documents.

1.02 RELATED REQUIREMENTS

- A. Definitions, and Additional Responsibilities of Parties: Conditions of the Contract.
- B. Section 01600: Material and Equipment
- C. Designate in the construction schedule, or in a separate coordinated schedule, the dates for submission and the dates that reviewed Shop Drawings, Product Data and Samples will be needed.

1.03 SHOP DRAWINGS

- A. Drawings shall be presented in a clear and thorough manner.
 - 1. Details shall be identified by reference to sheet and detail, schedule or room numbers shown on Contract Drawings.

1.04 PRODUCT DATA

- A. Preparation
 - 1. Clearly mark each copy to identify pertinent products or models.
 - 2. Show performance characteristics and capabilities.
 - 3. Show dimensions and clearances required.
 - 4. Show piping diagrams.
- B. Manufacturer's standard schematic drawings and diagrams:
 - 1. Modify drawings and diagrams to delete information which is not applicable to the Work.
 - 2. Supplement standard information to provide information specifically applicable to the Work.

1.05 CONTRACTOR RESPONSIBILITIES

- A. Review Shop Drawings, Product Data and samples prior to submission
- B. Determine and verify.

1. Field measurements.
 2. Field construction criteria.
 3. Catalog numbers and similar data.
 4. Conformance with specifications.
- C. Coordinate each submittal with requirements of the Work and of Contract Documents.
- D. Notify the Engineer in writing, at time of submission, of any deviations in the submittals from requirements of the Contract documents.
- E. Begin no fabrication or work which requires submittals until return of submittals with Engineer approval.

1.06 SUBMISSION REQUIREMENTS

- A. Make submittals promptly in accordance with approved schedule, and in such sequence as to cause no delay in the work or in the work of any other contractor.
- B. Number of submittals required:
1. Shop Drawing: Submit one reproducible transparency and two opaque reproductions.
 2. Product Data: Submit the number of copies which the Contractor requires, plus two which will be retained by the Engineer.
- C. Submittals shall contain:
1. The date of submission and the dates of any previous submissions.
 2. The Project Title and Number.
 3. Contract identification.
 4. The names of:
 - a. Contractor.
 - b. Supplier.
 - c. Manufacturer.
 5. Identification of the product, with the specification section number.
 6. Field dimensions, clearly identified as such.
 7. Relation to adjacent or critical features in the Work or materials.

8. Applicable standards, such as ASTM or Federal Specification numbers.
9. Identification of deviations from Contract Documents.
10. Identification of revisions on resubmission.
11. An 8 in. x 3 in. blank space for Contractor and Engineer stamps.
12. Contractor's stamp, verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the Work and of Contract Documents.
13. Initials or signature of Contractor or designated representative.

1.07 RESUBMISSION REQUIREMENTS

- A. Make any corrections or changes in the submittals required by the Engineer and resubmit until approved.
- B. Shop Drawings and Product Data:
 1. Revise initial drawings or data, and resubmit as specified for the initial submittal.
 2. Indicate any changes which have been made other than those requested by the engineer.
- C. Samples: Submit new samples as required for initial samples.

1.08 DISTRIBUTION

- A. Distribute reproductions of Shop Drawings and copies of Product Data which carry the Engineer stamp of approval to:
 1. Record Documents file.
 2. Other affected contractors.
 3. Subcontractors.
 4. Resident Inspector.
- B. Distribute samples which carry the Engineer stamp of approval as directed by the Engineer.

1.09 ENGINEER DUTIES

- A. Review submittals with reasonable promptness and in accord with schedule.

B. Affix stamp and initials or signature, and indicate requirements for resubmittal, or approval of submittal.

C. Return submittals to Contractor for distribution, or for resubmission.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01410 - TESTING LABORATORY SERVICES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Contractor shall employ and pay for the services of an Independent Testing Laboratory to perform specified services and testing.
- B. PWSB Laboratory shall perform all disinfection procedure testing at no additional expense to the Contractor. PWSB Engineering shall perform all sampling at no additional expense to the Contractor.

1.02 RELATED REQUIREMENTS

- A. Conditions of the Contract: Inspections and testing required by laws, ordinances, rules, regulations, orders or approvals of public authorities.
- B. Respective sections of specifications requiring testing.

1.03 QUALIFICATION OF LABORATORY

- A. Meet "Recommended Requirements for Independent Laboratory Qualification" published by American Council of Independent Laboratories.
- B. Authorized to operate in the State of Rhode Island.
- C. Testing Equipment:
 - 1. Calibrated at reasonable intervals by devices of accuracy traceable to either:
 - a. National Bureau of Standards.
 - b. Accepted Values of natural physical constants.

1.04 LABORATORY DUTIES

- A. Cooperate with the Owner and/or Engineer and the Contractor; provide qualified personnel after due notice.
- B. Perform specified inspections, sampling and testing of materials and methods of construction:
 - 1. Comply with specified standards.
 - 2. Ascertain compliance of materials with requirements of Contract Documents.
- C. Promptly notify the Owner and/or Engineer and the Contractor of observed irregularities or deficiencies of work or products.
- D. Promptly submit written report of each test and inspection; one copy each to Engineer, Owner, Contractor, and one copy to Record Documents File. Each report shall include:

1. Date issued.
 2. Project title and number.
 3. Testing laboratory name, address and telephone number.
 4. Name and signature of laboratory inspector.
 5. Date and time of sampling or inspection.
 6. Record of temperature and weather conditions.
 7. Date of test.
 8. Identification of product and specification section.
 9. Location of sample in test or in the Project.
 10. Type of inspection or test.
 11. Results of test and compliance with Contract Documents.
 12. Interpretation of test results, when requested by Engineer.
- E. Perform additional tests as required by Engineer or the Owner.

1.05 LIMITATIONS OF AUTHORITY OF TESTING LABORATORY

- A. Laboratory is not authorized to:
1. Release, revoke, alter or enlarge on requirements of Contract Documents.
 2. Approve or accept any portion of the Work.
 3. Perform any duties of the Contractor.

1.06 CONTRACTOR'S RESPONSIBILITIES

- A. Cooperate with laboratory personnel, provide access to Work to Manufacturer's operations.
- B. Secure and deliver to the laboratory adequate representational samples of materials proposed to be used and which require testing.
- C. Provide to the laboratory the preliminary design mix proposed to be used for concrete, and other materials which require control by the testing laboratory.
- D. Furnish copies of Products test reports as required.
- E. Furnish incidental labor and facilities:
1. To provide access to Work to be tested.
 2. To obtain and handle samples at the Project site or at the source of the product to be tested.

3. To facilitate inspections and tests.
 4. For storage and curing of test sample.
- F. Notify laboratory sufficiently in advance of operations to allow for laboratory assignment of personnel for the tests.
- G. Employ and pay for the services of a separate equally qualified testing laboratory to perform additional inspections, sampling and testing required:
1. For the Contractor's convenience
 2. When initial tests indicate Work does not comply with Contract Documents.
- H. Employment of the laboratory shall in no way relieve Contractor's obligations to perform work of the contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

Section 01570 - TRAFFIC CONTROL

PART 1-GENERAL

1.01 SCOPE OF WORK

The work required by this section of the Specifications includes furnishing the services of uniformed police officers and State certified flagpersons for direction of traffic during construction activities, as required, as ordered, or as otherwise directed by the Owner or Engineer.

PART 2-PRODUCTS

None

PART 3-EXECUTION

3.01 METHOD OF MEASUREMENT

For this work there will be a maximum of four police officers to be used daily and the balance of the traffic control work force needed shall be made up of State certified flagpersons.

For the services of uniformed police officers to direct traffic during construction activities, payment will be made directly to the respective police payroll departments by the Owner. The Contractor is responsible for all coordination with the respective police departments. The Contractor is responsible at no cost to the Owner for scheduling police officer details, verifying, signing, and collecting all daily receipts from the officers and submitting them on a daily basis to the Engineer for processing.

For the services of State certified flagpersons to direct traffic during construction activities, payment will be made directly to the Contractor under the item for Flagperson as listed in the Bid. The Contractor is responsible for all coordination with the flagpersons. The Contractor is responsible at no cost to the Owner for all scheduling and coordination of flagpersons as part of his work force. Flagpersons shall be paid the prevailing wage rate set by the Rhode Island Department of Labor and shall be listed as part of the certified payrolls submitted on a monthly basis.

3.02 BASIS OF PAYMENT

There will be no separate payment to the Contractor for this work. Flagpersons supplied by the Contractor will not be considered for payment. State certified Flagpersons shall be eligible for payment and shall be paid to the Contractor at the rate as listed in the bid. The unit price bid shall constitute compensation for the flagperson's services - including fringe benefits, and for associated protective clothing, hand signaling devices, and incidentals as deemed necessary by the Engineer. Payment will be made directly to the respective police department payroll departments by the Owner for police details.

END OF SECTION

SECTION 01576 - PROTECTION OF TRAFFIC, PERSONS AND PROPERTY

PART 1-GENERAL

1.01 SCOPE OF WORK

- A. The work required by this section of the Specifications includes the furnishing, erecting, moving, re-erecting, maintaining, and removal of all signs, traffic cones, barricades, warning lights, and other devices necessary to adequately protect persons and property, and safeguard, maintain and direct vehicular and pedestrian traffic through the project for the entire duration of the project.
- B. The Contractor shall provide a sufficient number of travel lanes and pedestrian passageways to move all traffic ordinarily using the project area. If at all possible, at least one travel lane shall remain open.
- C. The Contractor shall satisfy all State and municipal requirements for maintenance and protection of traffic for this project.

PART 2-PRODUCTS

2.01 MATERIALS

All signs, traffic cones, barricades and necessary devices shall be of sufficient size and color so as to adequately inform the public of any possible traffic hazards and alternate routes, and shall conform to the details as outlined in "State of Rhode Island, Department of Transportation, Division of Public Works, Guide Signs and Construction Signs", and U. S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices", latest revisions.

PART 3-EXECUTION

3.01 WORKMANSHIP

- A. Travel lanes and pedestrian passageways shall be drained and kept neat and reasonably smooth and in suitable condition at all times in order to provide minimum interference to vehicular and pedestrian traffic consistent with the proper prosecution of the work.
- B. Suitable ingress and egress shall be provided at all times where required, for all intersecting roads and driveways, and for all abutting properties having legal access.
- C. Prior to construction, the Contractor will submit for approval by the Owner (and RIDOT Maintenance Division on state roadways) a schedule showing the proposed sequence of operations and a compatible method of maintaining traffic, and shall coordinate all such operations with the RIDOT Maintenance Division, Town of Cumberland, City of Central Falls, and the City of Pawtucket Police, Fire, and Traffic Departments.

- D. The Contractor shall keep all signs in proper position, clean and legible at all times. Care shall be taken so that weeds, shrubbery, construction materials or equipment, and spoil, are not allowed to obscure any sign, light or barricade. Signs that do not apply to existing conditions shall be removed or adjusted so that the legend is not visible to approaching traffic.
- E. Should the Contractor fail to perform any of the work required under this Section, the Owner may perform or arrange for others to perform such work. In such cases, the Owner will deduct from money due or to become due to the Contractor all expenses connected therewith which are found to be greater than the cost to the Owner had the Contractor performed the specified work.
- F. At no time shall the Contractor leave equipment or materials in the travel lanes or pedestrian walkways overnight without permission from the Engineer and without proper signs and lighted barricades.

3.02 METHOD OF MEASUREMENT

This item will not be measured for payment.

3.03 BASIS OF PAYMENT

No separate payment will be made under this Section of the Specifications for furnishing and maintaining signs, barricades, warning lights, and other devices required and necessary to protect persons and property and to safeguard and maintain and direct vehicular and pedestrian traffic during the length of the project, but the cost thereof shall be deemed to be included in the prices bid for other items of the work.

END OF SECTION

SECTION 01600 - MATERIAL AND EQUIPMENT

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Material and equipment incorporated into the Work:

1. Conform to applicable specifications and standards.
2. Comply with size, make, type and quality specified, or as specifically approved in writing by the Engineer.
3. Manufactured and Fabricated Products:
 - a. Design, fabricate and assemble in accord with the best engineering and shop practices.
 - b. Manufacture like parts of duplicate units to standard sizes and gages, to be interchangeable.
 - c. Two or more items of the same kind shall be identical, by the same manufacturer.
 - d. Products shall be suitable for service conditions.
 - e. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
4. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

1.02 RELATED REQUIREMENTS

- A. Conditions of the Contract.
- B. Section 01710: Cleaning.

1.03 REUSE OF EXISTING MATERIAL

- A. Except as specifically indicated or specified, materials and equipment removed from the existing structure shall not be used in the completed Work.
- B. For material and equipment specifically indicated or specified to be reused in the Work:
 1. Use special care in removal, handling, storage and reinstallation, to assure proper function in the completed Work.

2. Arrange for transportation, storage and handling of products which require off-site storage, restoration or renovation. Pay all costs for such work.

1.04 MANUFACTURER'S INSTRUCTIONS

- A. When Contract Documents require that installation of work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, including two copies to Engineer.
 1. Maintain one set of complete instructions at the job site during installation and until completion.
- B. Handle, install, connect, clean, condition and adjust products in strict accord with such instructions and in conformity with specified requirements.
 1. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Engineer for further instructions.
 2. Do not proceed with work without clear instructions.
- C. Perform work in accord with manufacturer's instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

1.05 TRANSPORTATION AND HANDLING

- A. Arrange deliveries of Products in accord with construction schedules, coordinate to avoid conflict with work and conditions at the site.
 1. Deliver Products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
 2. Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that Products are properly protected and undamaged.
- B. Provide equipment and personnel to handle Products by methods to prevent soiling or damage to Products or packaging.

1.06 STORAGE AND PROTECTION

- A. Store Products in accord with manufacturer's instructions, with seals and labels intact and legible.
 1. Store products subject to damage by the elements in weather tight enclosures.
 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions.

B. Exterior Storage.

1. Store fabricated products above ground, on blocking or skids, prevent soiling or staining. Cover products which are subject to deterioration with impervious sheet coverings, provide adequate ventilation to avoid condensation.
2. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter. At no time is material to be stored in the travel lanes or pedestrian walkways overnight without the permission of the Engineer and without proper signing and barricades.

C. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored Products to assure that Products are maintained under specified conditions, and free from damage or deterioration.

D. Protection After Installation:

1. Provide substantial coverings as necessary to protect installed Products from damage from traffic and subsequent construction operations. Remove when no longer needed.

1.07 SUBSTITUTIONS AND PRODUCT OPTIONS

A. Products List.

1. Submit to the Engineer a complete list of major products proposed to be used, with the name of the manufacturer and the installing subcontractor.

B. Contractor's options

1. For Products specified only by reference standard, select any product meeting that standard.
2. For Products specified by naming several products or manufacturers, select any one of the products or manufacturers named, which complies with the specifications.
3. For Products specified by naming one or more Products or manufacturers and "or equal", Contractor must submit a request as for substitutions for any Product or manufacturer not specifically named.
4. For Products specified by naming only one Product and manufacturer, there is no option.

C. Substitutions.

1. For a period of 30 days after the Notice of Award, Engineer will consider written requests from Contractor for substitution of Products.

2. Submit a separate request for each Product, supported with complete data, with drawings and samples as appropriate, including:
 - a. Comparison of the qualities of the proposed substitution with that specified.
 - b. Changes required in other elements of the work because of the substitution.
 - c. Effect on the construction schedule.
 - d. Cost data comparing the proposed substitution with the Product specified.
 - e. Any required license fees or royalties.
 - f. Availability of maintenance service, and source of replacement materials.
3. Engineer shall be the judge of the acceptability of the proposed substitution.

D. Contractor's Representation:

1. A request for a substitution constitutes a representation that Contractor:
 - a. Has investigated the proposed Product and determined that it is equal to or superior in all respects to that specified.
 - b. Will provide the same warranties or bonds for the substitution as for the Product specified.
 - c. Will coordinate the installation of an accepted completely in all respects.
 - d. Waives all claims for additional costs, under his responsibility, which may subsequently become apparent.

E. Engineer will review requests for substitutions with reasonable promptness, and notify Contractor, in writing, of the decision to accept or reject the requested substitution.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01700 - CONTRACT CLOSEOUT

Part 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Comply with requirements stated in Conditions of the Contract and in Specifications for administrative procedures in closing out the Work.

1.02 RELATED REQUIREMENTS

- A. Conditions of the Contract. Fiscal provisions, legal submittals and additional administrative requirements:

- B. Section 01710: Cleaning.

1.03 SUBSTANTIAL COMPLETION

- A. When Contractor considers the work is substantially complete, he shall submit to the Owner and/or Engineer:

- 1. A written notice that the Work, or designated portion thereof, is substantially complete.
- 2. A list of items to be completed or corrected.

- B. Within a reasonable time after receipt of such notice, the Owner and/or Engineer will make an inspection to determine the status of completion.

- C. Should the Owner and/or Engineer determine that the Work is not substantially complete:

- 1. The Owner and/or Engineer will promptly notify the Contractor in writing with a punchlist of deficiencies, giving the reasons therefore.
- 2. The Contractor shall remedy the deficiencies in the Work, and send a second written notice of substantial completion to the Owner and/or Engineer.
- 3. The Owner and/or Engineer will reinspect the Work.

- D. When the Owner and/or Engineer concurs that the Work is substantially complete, he will:

- 1. Prepare a Certificate of Substantial Completion on AIA Form G704, accompanied by Contractor's list of items to be completed or corrected, as verified and amended by the Owner and/or Engineer.
- 2. Submit the Certificate to the Owner and Contractor for their written acceptance of the responsibilities assigned to them in the Certificate.

1.04 FINAL INSPECTION

- A. When the Contractor considers the Work is complete, he shall submit written certification that:
1. Contract Documents have been reviewed.
 2. Work has been inspected for compliance with Contract Documents.
 3. Work has been completed in accordance with Contract Documents.
 4. Equipment and systems have been tested in the presence of the Owner's representative and are operational.
 5. Work is completed and ready for final inspection.
- B. The Owner and/or Engineer will make an inspection to verify the status of completion with reasonable promptness after receipt of such certification.
- C. Should the Owner and/or Engineer consider that the Work is incomplete or defective:
1. The Owner and/or Engineer will promptly notify the Contractor in writing, listing the incomplete or defective work.
 2. The Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to Owner and/or Engineer that the Work is complete.
 3. The Owner and/or Engineer will reinspect the Work.
- D. When the Owner and/or Engineer finds that the Work is acceptable under the Contract Documents, he shall request the Contractor to make closeout submittals.

1.05 REINSPECTION FEES

- A. Should the Engineer perform reinspections due to failure of the Work to comply with the claims of status of completion made by the Contractor:
1. The Owner will compensate the Engineer for such additional services.
 2. The Owner will deduct the amount of such compensation from the final payment to the Contractor.

1.06 CONTRACTOR'S CLOSEOUT SUBMITTALS TO ENGINEER

- A. Evidence of compliance with requirements of governing authorities:
1. Certificate of Occupancy.

- 2. Certificates of Inspection.
- B. Spare Parts and Maintenance Materials.
- C. Evidence of Payment and Release of Liens: To requirements of General and Supplementary Conditions.
- D. Certificate of Insurance for Products and Completed Operations.
- E. Evidence of Payment or rectification of any and all claims for damages resulting from the Contractor's work under this Contract.

1.07 FINAL ADJUSTMENT OF ACCOUNTS

- A. Submit a final statement of accounting to the Owner and/or Engineer.
- B. Statement shall reflect all adjustments to the Contract Sum:
 - 1. The original Contract Sum.
 - 2. Additions and deductions resulting from:
 - a. Previous Change Orders.
 - b. Allowances
 - c. Unit Prices.
 - d. Deductions for uncorrected Work.
 - e. Penalties and Bonuses.
 - f. Deductions for liquidated damages.
 - g. Deductions for reinspection payments.
 - h. Other adjustments.
 - 3. Total Contract Sum, as adjusted.
 - 4. Previous payments.
 - 5. Sum remaining due.
- C. The Engineer will prepare a final Change Order if necessary, reflecting approved adjustments to the Contract Sum which were not previously made by Change Orders.

1.08 FINAL APPLICATION FOR PAYMENT

- A. The Contractor shall submit the final Application for Payment in accordance with procedures and requirements stated in the Conditions of the Contract.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01710 - CLEANING

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Execute cleaning, during progress of the Work, and at completion of the Work, as required by General Conditions.

1.02 RELATED REQUIREMENTS

- A. Conditions of the Contract.
- B. Each Specification Section: Cleaning for specific Products or work.
- C. Section 01700: Contract Closeout.

1.03 DISPOSAL REQUIREMENTS

- A. Conduct cleaning and disposal operations to comply with codes, ordinances, regulations, and antipollution laws.

PART 2-PRODUCTS

2.01 MATERIALS

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.
- B. Use only those cleaning materials and methods recommended by manufacturer of the surface material to be cleaned.
- C. Use cleaning material only on surfaces recommended by cleaning material manufacturer.

PART 3 - EXECUTION

3.01 DURING CONSTRUCTION

- A. Execute daily cleaning to keep the Work, the site and adjacent properties free from accumulations of waste materials, tuberculation matter, dust, rubbish and windblown debris, resulting from construction operations.
- B. Provide on-site containers for the collection of waste materials, debris and rubbish.
- C. Remove waste materials, debris and rubbish from the site daily and dispose of at legal disposal areas away from the site.
- D. Provide daily sweeping of the road surface with adequate 'street' brooms. The entire construction site is to be swept free of gravel, dust and dirt and returned to the trench area for the duration of the

construction and until the permanent patch is installed. Calcium Chloride is to be applied daily as conditions warrant or as directed by the Engineer.

- E. At the discretion and direction of the Engineer, the Contractor shall employ the use of a "full size" mechanical type street sweeper. This sweeper shall be a self propelled and driveable three or four wheel "Pelican" municipal type that employs the use of a built in water dust control system. The Contractor shall inform the Engineer of where and when the sweeper is working and is using PWSB water to fill the tanks. There will be no charge to the Contractor for water used for dust control. The Contractor is responsible for all hauling and proper disposal of debris collected by all sweeping operations under this contract. This sweeping operation shall be done to the complete satisfaction and approval of the Engineer. The purpose of this item is not to take the place of the standard daily site cleaning, but to provide a "final" type cleaning after pavement has been placed or at times when the Engineer deems it necessary to be used.

3.02 FINAL CLEANING

- A. Employ skilled workmen for final cleaning.
- B. Broom clean exterior paved surfaces; rake clean other surfaces of the grounds.
- C. Prior to final completion, or Owner occupancy, Contractor shall conduct an inspection of all work areas, to verify that the entire Work is clean.

3.03 METHOD OF MEASUREMENT

- A. Daily sweeping and cleaning will not be measured separately for payment, but shall be deemed to be included in the cost of other items.
- B. Payment for "Mechanical "Full Size" Street Sweeper" will be measured separately for payment as the actual number of hours (Hrs.) worked in the operation of street sweeping by an approved "full size" mechanical street sweeper as described above. Payment for this item shall include a driver and any other costs involved in the hauling and proper disposal of all debris collected during the work. Only an approved type sweeper, and only when used at an approved or directed time and location will be measured for payment.

3.04 BASIS OF PAYMENT

- A. No separate payment will be made for normal daily sweeping and cleaning. Compensation for such work shall be considered to be included in the prices bid for other items of the proposal.
- B. Payment for "Mechanical "Full Size" Street Sweeper", as provided above, will be made at the unit price as listed in the Bid, and shall constitute full compensation for all labor, equipment, disposal of

debris, tools, work incidental, appurtenant and necessary to satisfactorily complete the work, as specified and indicated, or as directed by the Engineer.

END OF SECTION

DIVISION TWO-SITE WORK

INDEX TO SITE WORK

| <u>SECTION</u> | <u>TITLE</u> |
|----------------|--|
| 02015----- | TEST PITS |
| 02019----- | WORK CREW TIME DELAY |
| 02211----- | EARTH TRENCH EXCAVATION AND BACKFILL |
| 02221----- | ROCK REMOVAL |
| 02377----- | EXCAVATION SUPPORT SYSTEMS |
| 02401----- | DEWATERING, CONTROL AND DIVERSION OF WATER |
| 02486----- | RESTORATION OF LAWNS AND RIGHT OF WAY AREAS |
| 02513----- | PAVEMENT RESTORATION |
| 02615----- | DUCTILE IRON WATER MAINS AND APPURTENANCES |
| 02640----- | GATE AND BUTTERFLY VALVES, TAPPING SLEEVE AND VALVES, INSERTION VALVES, LINSTOPS, VALVE BOXES AND APPURTENANCES |
| 02644----- | FIRE HYDRANTS |
| 02650----- | WATER SERVICE LINES |
| 02700----- | CLEANING AND LINING WATER MAINS |
| 02710----- | TESTING AND DISINFECTING WATER MAINS |
| 02713----- | INSTALLATION OF WATER PIPELINE SYSTEMS |
| 02750----- | TEMPORARY BY-PASS PIPING AND SERVICES |

SECTION 02015 - TEST PITS

PART 1 - GENERAL

1.01 SCOPE OF THE WORK

The work under this section includes furnishing all labor, equipment appliances, materials, and incidentals, and performing all operations in connection with excavating and backfilling, by machine and/or by hand, exploratory test pits at locations indicated or directed. The purpose of the test pits shall be for locating water mains, ground water, storm drains, sewerage pipes, and other utilities, rocks structure foundations, or other obstacles, and for examining soil.

PART 2 - PRODUCTS - None

PART 3 - EXECUTION

3.01 GENERAL

- A. Test pit excavations shall have neat, clean-cut and vertical sides. Upon completion of the test pit excavation, the Owner shall be notified so that any necessary location measurements can be made. Excavation and backfilling shall conform to the applicable requirements of the Section 02211 "Earth Trench Excavation and Backfill". Hand digging shall be employed when required by the Owner.
- B. It shall be agreed that the Contractor entered into this contract with full knowledge that in any work involving excavation, operation in public highways, or adjacent to other developments, some unforeseen utility relocations, obstacles, difficulties, unforeseen soil or groundwater conditions, etc., may be encountered; and that the contractor has included in his bid and contract obligations the assumptions of the risks and costs to which such obstacles, etc. may subject him.

3.02 METHOD OF MEASUREMENT

Excavation for test pits will be measured for payment by the unit "Each".

3.02 BASIS FOR PAYMENT

Payment for "TEST PITS", measured as provided above, will be made at the unit price bid as listed under that item in the Bid, and such price shall include the excavation and backfill of all materials, all labor, equipment and incidentals, and the restoration of property.

No payment will be made for test pits used as excavation trenches for the installation of new water transmission mains, service connections, valves and hydrant assemblies and appurtenant work. Crushed processed gravel shall be paid for under a separate item. Temporary and permanent pavement replacement shall be paid for at the unit price as listed in the bid.

END OF SECTION

SECTION 02019 - WORK CREW TIME DELAY

PART 1 - GENERAL

1.01 SCOPE OF THE WORK

The work under this section includes all labor, equipment and incidentals, and performing all operations in connection with a delay to a Contractor's Work Crew due to the lack of a water main shutdown in a reasonable timeframe. The purpose of the time delay item shall be to compensate the Contractor for labor and equipment costs incurred during said delay in prosecution of the work.

PART 2 - PRODUCTS - None

PART 3 - EXECUTION

3.01 GENERAL

- A. Due to the age, condition, and records of the distribution system, a scheduled water main shutdown may not be possible in a prompt fashion. When in the opinion of the Engineer, the Contractor has been delayed in the progress of his work by the lack of a scheduled shutdown, he may be entitled to compensation for delay for the crew and equipment on site.
- B. The unit cost listed in the Bid shall include all costs associated with the crew on site including but not limited to all labor, benefits, overtime, trucks, excavators, backhoes, loaders, tools, and all equipment on site and scheduled to be used in the work. Lost overhead and profit is also deemed to be included in the unit price listed in the Bid.
- C. The delay shall be in effect when in the opinion of the Engineer, the Contractor is ready to cut into the distribution system piping ("cut pipe") and it is later than 9:00 AM. The maximum delay for a given day will be 7 hrs. The PWSB will start turning valves but does not shut down the water system completely before 8:00 AM under normal circumstances.

3.02 METHOD OF MEASUREMENT

A Work Crew Time Delay will be measured for payment by the unit "Hr". Measurement will be rounded to the nearest half hour if necessary.

3.02 BASIS FOR PAYMENT

Payment for "WORK CREW TIME DELAY", measured as provided above, will be made at the unit price bid as listed under that item in the Bid, and such price shall include all costs associated with labor, benefits, overtime, trucks, excavators, backhoes, loaders, tools, and all equipment on site.

No separate payment will be made for overhead and anticipated profit or the cost associated with rescheduling work if necessary.

END OF SECTION

SECTION 02211-EARTH TRENCH EXCAVATION AND BACKFILL

PART 1-GENERAL

1.01 DESCRIPTION

A. Scope of the work:

The work under this section of the Specifications includes the furnishing of all labor, equipment and materials, and performing all operations in connection with excavating, backfilling, compacting, grading, and all other incidental earth work necessary and required for the satisfactory installation of new water mains, service connections, hydrant assemblies, valves, and appurtenant work in accordance with the Drawings and Specifications, and as directed by the Owner. The work also includes installing sheeting and bracing as necessary; providing approved crushed processed gravel from off-site sources when directed for backfills of excavation and refills of below-grade excavations, and for bedding for pipelines; excavation and disposal at approved locations of pavements, surplus and unsuitable materials; protection of existing pipelines, utilities and structures and of new work; compaction of trench bottom, backfills, refills and subgrades; restoration of sidewalks and grassed areas and lawns; the removal and replacement of walls, fences and other structures which may be removed to carry out the work; and all other appurtenant work as required or as directed by the Owner. Included in the work of this item shall be the furnishing and proper and safe placement of approved steel plates on all open trenches during non-working hours. Such steel plates shall be adequate for wheel loads anticipated.

B. Related Work Described Elsewhere:

| | |
|---|---------------|
| 1. Test Pits | Section 02015 |
| 2. Rock Removal | Section 02221 |
| 3. Excavation Support Systems | Section 02377 |
| 4. Dewatering, Control and Diversion of Water | Section 02401 |
| 5. Restoration of Lawns and Right-of-way Areas | Section 02486 |
| 6. Pavement Restoration | Section 02513 |
| 7. Installation of Water Pipeline Systems | Section 02713 |
| 8. Gate Valves, Tapping Sleeves and Valves, Valve Boxes and Appurtenances | Section 02640 |
| 9. Fire Hydrants | Section 02644 |
| 10. Water Service Lines | Section 02650 |

C. References:

Within this section, the Rhode Island Standard Specification for Road and Bridge Construction, latest edition, will be referred to as the "State Standards". All references to measurement and payment are deleted.

D. Laws and Regulations:

All work under this Contract shall be accomplished in accordance with regulations of local, county and state and federal agencies and national or utility company standards as they apply.

1.02 JOB CONDITIONS

A. Dewatering:

The required excavations may be to some extent below existing groundwater levels. All excavations shall be kept dry at all times, and all construction work shall be performed in the dry, unless otherwise authorized or directed by the Owner. The providing and maintaining of facilities from flooding is included under Section 02401 "DEWATERING, CONTROL, AND DIVERSION OF WATER."

B. Protection of Trees and Shrubbery:

Existing trees and shrubbery shall be protected from injury. Except as otherwise permitted, cutting and trimming of existing trees will not be permitted. All existing trees which may be damaged by construction operations shall be boxed and protected as required or directed. All such protection shall be maintained until completion of the work of the contract, unless otherwise directed.

C. Disposal of Excavated Material:

All excavated earth materials approved by the Owner as suitable for reuse shall be used for backfilling excavations and for rough grading as necessary for the completion of the contract work. All surplus or unsuitable materials, rock, boulders, and pavement material, and existing pipe removed from the trench during excavation, shall be removed and satisfactorily disposed of off the site by the Contractor, at no additional expense to the Owner.

D. Unsuitable Materials:

1. Unsuitable materials are herein defined as organic material, peat, organic silt, or combinations thereof, all having unsuitable bearing properties; and all materials of whatever description which are too loose or saturated for use as backfill to provide satisfactory bearing. If unsuitable material is encountered at the depths indicated on the Drawings for bottom limit of excavation, the Contractor shall immediately notify the owner and shall not proceed further until instructions are given.

2. The Contractor shall satisfactorily excavate and remove all unsuitable material to the lines, grades and limits indicated on the Drawings, or as directed by the Engineer, and shall satisfactorily dispose of such material off the site. All resulting below-grade excavations shall be refilled with crushed processed gravel, as directed.
3. Material which becomes unsuitable as a result of the Contractor's lack of dewatering or improper dewatering shall be removed by the Contractor and replaced with crushed processed gravel, as directed and approved by the Owner, at no additional expense to the Owner.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Crushed Processed Gravel:

Crushed processed gravel for backfill and refills of below-grade excavations, as directed, for pipe bedding, and subbase for pavement and sidewalks, and to replace existing gravel roadways, shall be provided from off-site sources in the quantities required for completion of the work, and shall be as approved by the Owner. All gravel shall consist of clean, hard and durable stone, well graded, and shall be free from clay, organic matter and other objectionable material. It shall, in general, be as specified by the "Standard Specifications for Road and Bridge Construction" of the State of Rhode Island, Article M.01.09, Crushed Gravel. No segregation of large or fine particles will be allowed, but the gravel as spread shall be well graded with no pockets of fine material. Crushed gravel shall conform to the following gradation limits:

| U.S. Standard Sieve Size | Percentage Passing By Weight |
|-----------------------------|---------------------------------|
| 2 inch | 100 |
| 3/4 inch | 50-80 |
| No. 4 | 30-50 |
| No. 200 | 0-5 |

All gravel shall be plant processed, crushed and washed, yellow or brown in color. Gravel shall not be gray or black in color.

PART 3 - EXECUTION

3.01 EXCAVATION

A. General:

1. Earth excavation shall include the excavation, removal and satisfactory disposal of all materials of whatever nature encountered from within the limits indicated or specified or as directed in writing, other than rock or ledge as defined under

another Section 02221 "ROCK REMOVAL." It shall include but not be limited to earth materials such as peats, organic or inorganic silts, clay, sand and gravel; pavements; cobbles and boulders less than 1/2 cubic yard in volume; soft or disintegrated rock which, in the opinion of the Owner, can be removed without blasting or drilling; brick and concrete pavements and masonry; and all obstructions not specifically included in another Section.

2. All excavation, sheeting, shoring and dewatering operations shall be accomplished to prevent the undermining or disturbing of existing pipelines, utilities and structures or of any completed construction.

B. Excavation:

1. Excavation shall be made to the lines and grades shown on the drawings or as modified by the Owner. Excessive trench widths will not be permitted. Excavations shall be accurately graded to allow satisfactory construction of the contract work. Immediately after excavation to the indicated or directed trench bottom, the Contractor shall compact the exposed surface with two (2) passes of an approved plate-type vibratory compactor.
2. The bottoms of excavations shall be thoroughly compacted and in approved condition prior to placing gravel bedding. Gravel bedding shall be placed in layers not exceeding 6 inches in loose depth and each layer shall be compacted by at least 2 passes of an approved plate-type vibratory compactor. The moisture content of the gravel shall be adjusted, by moisture or drying, so that proper compaction will be obtained.
3. Pipe bell holes and depressions for joints shall be dug after the trench bottom has been graded and compacted and after gravel bedding has been placed and compacted. The bottom quadrant of each pipe barrel shall have complete and uniform bearing for the full length of each pipe. The trench bottom shall again be thoroughly compacted just prior to final shaping for bedding and installation of pipe. The Contractor shall exercise care in all placing and compacting operations so as to prevent disturbing joints and displacement or damage to the pipe.
4. Excavation operations adjacent to and below existing structures and utilities shall be done manually and in a manner to prevent disturbance of or damage to the existing structures and utilities. Butt bracing of utility poles shall be utilized where necessary to safeguard the poles.
5. Existing pavements and base courses shall be carefully saw cut and removed to obtain sound, vertical edges to the lines indicated. Existing pavements and base courses beyond the indicated lines which are to remain and which have been disturbed or damaged shall be restored or replaced by the Contractor to match existing pavements and base courses, at no additional expense to the Owner.

Existing pavements and base courses to remain shall be protected by the Contractor. Refer to Section 02513 "PAVEMENT RESTORATION" for additional requirements.

6. The Contractor shall be responsible for keeping all excavated and construction material a safe distance back from the edge of excavations to avoid overloading the sides of excavations and to prevent slides or cave-ins.
7. If an excavation is made deeper or wider than that shown on the Drawings, unless directed in writing by the Owner, there will be no extra payment for such unauthorized excavation. Backfill and compaction of all unauthorized excavations shall be made by the Contractor with either selected materials from excavations or from processed gravel, as directed by the Owner, at no expense to the Owner.
8. If a pipe is to be placed in fill or the top of the pipe is within two feet of existing ground surface, the fill shall first be placed as specified herein to a height of not less than two feet over the top of the pipe and for a width of five feet beyond each side of the pipeline. Following placement of such fill, excavation and backfill shall proceed as specified herein.
9. All trench excavations over 5'-0" depth shall be performed in vertically sheeted or shored trenches. The Contractor may elect to employ a steel trenching box in lieu of the use of sheeting. The installation of sheeting shall be as specified in Section 02377 "EXCAVATION SUPPORT SYSTEMS". The use of a trenching box and the conditions and locations where the same shall be allowed, will be subject to the determination and approval of the Owner. No shoring or steel trenching box shall be used in areas underlain by unsuitable soils.
10. Where the Contractor elects to use sheeting, or where sheeting is ordered by the Owner, it shall be installed as the excavation progresses, to maintain or otherwise protect the sides of the excavation from cave-ins or loss of ground. No separate payment will be made for sheeting, unless ordered by the Owner to be left-in-place, in which case payment will be as specified under Section 02377 "EXCAVATION SUPPORT SYSTEMS". Sheeting shall be adequately braced to prevent cave-ins or loss of ground, and portions of the sheeting or bracing shall be left in place as directed by the Owner to maintain stability as backfilling progresses.
11. No excessive trench widths will be allowed to avoid the use of sheeting. The trench width at and below a level one foot above the top of the pipe shall not exceed the payment limit indicated on the drawings for the size pipe being installed, unless otherwise permitted by the Owner.
12. Where existing subsurface utilities or other facilities adjacent to or crossing through the excavation require temporary support or

protection, such temporary support or protection shall be satisfactorily provided by the Contractor, at no additional expense to the Owner. All necessary measures shall be taken by the Contractor to prevent lateral movement or settlement of existing facilities or of work in progress.

13. Grading shall be done as necessary to prevent surface water from flowing into excavations and any water accumulating therein shall be removed by pumping or other approved method as specified under Section 02401 "DEWATERING CONTROL AND DIVERSION OF WATER". The pipelines shall not, at any time, be used for trench drainage.
14. Where access pits for pipeline work are located in roadways, the contractor shall furnish, place and maintain approved steel plates during non-working hours. The steel plates shall overlap the trench opening by a minimum of 12 inches all around and shall be sized adequately to support anticipated wheel loads. The steel plates shall be secured to road surface to prevent movement under traffic loads.

3.02 BACKFILLING

A. Procedure:

1. Unless directed otherwise by the Owner, excavations shall not be backfilled until being inspected by the Engineer and until the work as installed conforms to all requirements specified in these Sections. Each layer of backfill material shall be moistened and compacted in such manner as to permit the proper and desired compaction of the backfill, so that paving of excavated areas can proceed immediately after backfilling is completed.
2. All excavations shall be backfilled as soon as practicable with approved excavated material. If suitable material as approved by the Owner is not available from the excavations in the quantities required for proper backfilling of excavations, the Contractor shall provide the necessary approved crushed processed gravel for backfilling.
3. All backfill in trenches from spring line of pipe to sub grade upon which pavements or top soils are to be placed shall be compactable materials as approved by the Owner, not frozen and without any stones larger than four inches in their greatest dimension. It shall be spread in layers not exceeding twelve (12) inches in loose depth and each layer shall be compacted to not less than 95 percent of maximum density in accordance with the requirements of section 202.03.3 titled "Compaction-General" of the State Standard Specifications. All trench backfilling shall be carefully placed to avoid disturbance of new work and of existing utilities or structures. The moisture content of backfill shall be such that proper compaction will be obtained. Puddling of backfill with water will not be permitted.

4. During filling and backfilling operations, pipelines will be checked by the Owner to determine whether any displacement of the pipe has occurred. If the inspection of the pipelines shows poor alignment, displaced pipe or any other defects, the defects designated by the Owner shall be remedied in a satisfactory manner by the Contractor at no additional expense to the Owner.
5. Backfilling against masonry or concrete shall only be done when approved. Symmetrical backfill loading adjacent to structures shall be maintained. During backfilling and compacting operations, care shall be exercised so that equipment used will not overload the structures. Backfill adjacent to structures shall be placed in layers not more than twelve (12) inches in loose depth and each layer thoroughly compacted to not less than 95 percent of maximum density in accordance with the requirements of section 202.03.3 titled "Compaction-General" of the State Standard Specifications.
6. After backfilling trenches, the Contractor shall maintain the filled surfaces in good condition, with a smooth surface level with adjacent undisturbed surfaces. Any subsequent settling shall be immediately repaired by the Contractor in a manner satisfactory to the Owner and such maintenance shall be provided by the Contractor for the remainder of this contract, at no additional expense to the Owner.
7. The finished surfaces of filled excavations shall be compacted, and reasonably smooth and free from surface irregularities. Sub grade upon which either topsoil or pavements is to be placed shall be maintained in a satisfactory condition until the finish courses are placed. The storage or stockpiling of materials on finished sub grade will not be permitted.
8. Prior to paving upon the sub grade, all soft or unsuitable material shall be removed and replaced with suitable material from excavation or processed gravel, as approved by the Owner. All low sections, holes or depressions shall be brought to the required grade with material approved by the Owner. The entire sub grade shall be shaped to line, grade and cross section and thoroughly compacted.

3.03 PROTECTION OF EXISTING UTILITIES AND STRUCTURES

A. Procedure:

1. Excavation and backfill operations shall be done in such a manner to prevent cave-in or the undermining, damage or disturbing of existing utilities and structures or of new work. Backfill shall be placed and compacted so as to prevent future settlement or damage to existing utilities and structures and new work.
2. The Contractor shall be responsible for contacting all utility companies prior to any trench excavations, and shall protect and

maintain all gas, water, and sewer lines and laterals encountered, and shall support the same during the course of his excavation and backfill.

3. Any excavations improperly backfilled or where settlement occurs, shall be reopened to the depth required, refilled with new materials, compacted, and the surface restored to the required grade and condition, at no additional expense to the Owner.
4. Any damage due to excavation, backfilling or settlement of the backfill, or injury to persons or damage to property occurring as a result of such damage, shall be the responsibility of the Contractor. All costs to repair such damage, in a manner satisfactory to the Owner, shall be borne by the Contractor at no additional expense to the Owner.

3.04 CONCRETE AND BITUMINOUS SIDEWALKS AND DRIVEWAYS

- A. Where concrete sidewalk, driveway, or curb is partially damaged, it shall be removed in its entirety from joint to joint and the entire slab of section shall be replaced. Concrete shall be as specified in Section 03310 "MISCELLANEOUS CONCRETE WORK". The cost of such removal and replacement shall be included in the unit price bid under the Item Class "A" Cement Concrete. All sidewalks, driveways, and curbs shall be removed and replaced where new services are installed as directed.
- B. Bituminous sidewalks and driveways partially damaged, shall be repaired as detailed on the Drawings and as specified in Section 02513 "PAVEMENT RESTORATION". Separate payment will be made for restoration of bituminous sidewalks and driveways at the unit price as listed in the Bid under the unit price for "TEMPORARY ASPHALT 2" AND PERMANENT ASPHALT 4"".

3.05 TEST PITS

- A. Test pits required, necessary, or ordered by the Owner to establish locations of existing pipelines or any other buried item for which the exact location is to be determined, are included and specified under Section 02015 "TEST PITS".

3.06 CLEANUP

- A. As the work progresses, and at the end of each work day, the Contractor shall remove and dispose all excess materials from excavation operations, trim-up all earth piles along trenches, dispose of all refuse, rubbish, scrap materials, and debris caused by his operations, and render the site of the work in a neat, unobstructed, unobtrusive, orderly and workmanlike appearance, at all times and to every extent possible.
- B. In case the Contractor shall fail or neglect to remove all such excess materials, debris, rubbish, etc. when ordered, the Owner may, after 24 hours notice to the Contractor, cause the cleanup work to be done by

others, and the cost thereof shall be deducted from any monies then or thereafter due the Contractor.

- C. The Contractor is advised that all disposal of excess materials and debris shall be in an approved manner consistent with proper disposal practices and procedures.

3.07 EXCAVATION EQUIPMENT

- A. No track type equipment shall be allowed on the job unless expressly permitted by the Owner. Rubber shoes are required on the stabilizers on all excavation equipment. All damage to existing pavement or sidewalk outside the limits of excavation as defined, shall be replaced by the Contractor to the satisfaction of the Owner, at no additional cost to the Owner.

3.08 METHOD OF MEASUREMENT

- A. The volume of "EARTH EXCAVATION AND BACKFILL" for new water mains, valves, hydrants, service connections, and all other items requiring excavation and backfill shall not be measured separately for payment.
- B. "CRUSHED PROCESSED GRAVEL" for pipe bedding and subbase for pavements, sidewalks and driveways, and as backfill and refill of below-grade excavations, as directed, will be measured separately for payment as the actual volume in cubic yards (C. Y.) measured in place, compacted to the lines, grade and limits shown on the Drawing.

For gravel delivered by weight and where site measurement is impractical, a conversion factor of 2800 lbs. per cubic yard of loose gravel and a compaction factor of 80% shall be applied to establish quantities for payment in cubic yards.

3.09 BASIS OF PAYMENT

- A. No separate payment will be made for work required under this Section of the Specifications for earth excavation, backfill, shoring, steel plating and all necessary related work. Compensation for such work shall be considered to be included in the prices bid for other items of the proposal.
- B. Payment for "CRUSHED PROCESSED GRAVEL", measured as provided above, will be made at the unit price as listed in the Bid, and shall constitute full compensation for all labor, equipment, tools, supplies materials and work incidental, appurtenant and necessary to satisfactorily complete the work, as specified and indicated, or as directed by the Owner.
- C. No separate payment will be made for sheeting and bracing, except that sheeting ordered by the Owner to be left-in-place will be measured and paid for as specified in Section 02377 "EXCAVATION SUPPORT SYSTEMS".

END OF SECTION

SECTION 02221 - ROCK REMOVAL

PART 1 - GENERAL

1.01 DESCRIPTION

A. General:

The Contractor is forewarned that Rock Excavation has been included in the Scope of Work for this Contract as a "Provisional Item", and it is the Owner's intent to minimize rock excavation whenever practicable. Should rock and/or ledge be encountered during the earth trench excavations, the Contractor shall notify the Owner immediately. The Contractor shall perform such additional excavations, as may be required by the Owner, to determine the limits and/or depths of the rock and/or ledge intruding into the limits of the excavations. If applicable, the Contractor shall modify the proposed locations of the installation(s) as directed by the Owner to minimize and/or avoid the rock excavation. Items of work incurred to minimize and/or avoid the excavation of rock and/or ledge, shall be measured as provided for in the applicable sections of the Specifications, and payment which will be made at the unit bid price for the respective items listed in the Bid, shall constitute full compensation for all work required therewith.

B. Scope of Work:

The work covered under this section of the Specifications consists of furnishing all labor, equipment and materials, and performing all operations in connection with rock excavation and subsequent earth refill within the payment lines for excavation, as indicated on the Drawings, and all incidental work in accordance with the Drawings and Specifications and as directed. For excavation and disposal of rock as defined below, the Contractor shall receive, in addition to the unit price bid for Earth Trench Excavation and Backfill, the unit price bid for Rock Removal and Refill. The work shall also include providing and compacting crushed processed gravel for refilling depressions resulting from removal of boulders; the satisfactory removal and disposal of the excavated rock materials; and the protection of existing utilities, structures and appurtenant facilities and the contract work.

C. Related Work Specified Elsewhere:

- | | |
|---|---------------|
| 1. Earth Trench Excavation and Backfill | Section 02211 |
| 2. Installation of Water Pipeline Systems | Section 02713 |

PART 2 - GENERAL

2.01 ROCK EXCAVATION

A. Procedure:

1. Rock excavation shall include the excavation, removal and disposal of all boulders and detached rock fragments 1/2 cubic yard or more in volume, and all ledge rock, the removal of which, in the opinion of the Owner, can be accomplished only by drilling and splitting mechanically or by hand or by blasting. Boulders of less than 1/2 cubic yard in volume and all soft or disintegrated rock which can be removed without the manipulation noted above, shall be classified as "earth excavation."
2. Where boulders are exposed on the sides of or in the bottom of excavations, they shall be wholly or partially removed, as specified or directed. Boulders shall be removed to not less than the lateral trench width payment lines indicated, not less than twelve inches outside structure walls, and to not less than twelve inches below the underside of pipes or structure foundation slabs. Depressions resulting from the removal of boulders shall be refilled with approved compacted crushed processed gravel to the depth shown on the Drawings. Crushed processed gravel for refilling will be paid for separately under the item for "Crushed Processed Gravel" as listed in the bid.
3. Rock occurring within the lines indicated for excavation for pipelines and structures shall be excavated to the lines indicated, unless otherwise directed in writing by the Owner. Unauthorized excavations of rock or excavations made beyond or below the indicated or directed limits, shall be refilled with approved compacted processed gravel, as directed by and at no additional expense to the Owner.
4. Whenever rock is encountered, it shall be stripped of the overlying material in segments as directed by the Owner. Rock shall be excavated not less than 30 feet in advance of installation operations, unless otherwise directed by the Owner.
5. Wherever a stub, house service or other provision for a future connection is placed in the water main in a rock cut, the rock shall be removed for a distance of two feet or more, if directed, horizontally from the end of the pipe or service and in the direction of future extensions or connections. This additional rock excavation will be estimated and paid for to the lines directed.

2.02 BLASTING

- A. Rock shall be removed by drilling and splitting mechanically, or by hand, or by any other approved method, including the use of explosives. No separate payment will be made for such methods and all associated

costs shall be included in the contract unit price bid for rock excavation.

- B. If blasting is to be used it is recommended that a pre-blast survey and a post-blast survey be taken of the immediate area. This survey should include video and digital pictures.

2.03 METHOD OF MEASUREMENT

- A. "ROCK REMOVAL" will be measured in cubic yards (C.Y.) in its original position, prior to excavation, computed to the payment lines indicated or directed in writing by the Owner. If rock excavation is directed to be performed to less than the payment width and/or depth, the Contractor will be paid only for the quantities of rock excavated within the lines. Unauthorized excavations will not be measured for payment.
- B. Those portions of trench excavation classified and paid for as "ROCK REMOVAL" of the various depths and as listed in the bid will be the actual volumes of rock removed within the payment lines at the applicable bottom depth price.
- C. Boulders or detached rock fragments which are 1/2 cubic yard and more in volume will be measured individually and the volume computed from the average dimensions taken in three representative directions.

2.04 BASIS OF PAYMENT

- A. Payment for "ROCK REMOVAL", measured as provided above, will be made at the unit price bid as listed in the Bid.

END OF SECTION

SECTION 02401 - DEWATERING, CONTROL AND DIVERSION OF WATER

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

The work under this section of the Specifications consist of the furnishing of all labor, equipment, tools and materials and performing all operations in connection with the de-watering, control and diversion of water and all other operations necessary to maintain all excavations and work areas of this contract in a dry condition. The Contractor shall be responsible for providing, maintaining, operating and removing all dewatering and other facilities, including all pumping and appurtenant equipment required to maintain in a dry condition the areas in which construction of this contract is to be conducted. The Contractor shall be responsible for performing all required dewatering in a manner to prevent injury to persons or public health and damage to existing facilities or the work in progress.

B. Related Work Specified Elsewhere:

- | | |
|---|---------------|
| 1. Earth Trench Excavation and Backfill | Section 02211 |
| 2. Excavation Support Systems | Section 02377 |
| 3. Installation of Water Pipeline Systems | Section 02713 |

PART 2 - PRODUCTS

2.01 MATERIALS

- A. The Contractor shall provide all end caps, bypasses, pumps, drains, well points, cofferdams or any facility necessary for the control, collection and disposal of all surface and subsurface water encountered in the performance of the contract work.

PART 3 - EXECUTION

3.01 GENERAL

- A. The excavations for work required under this contract may be to some extent below existing ground water levels. The Contractor shall operate and maintain all pumps, drains, well points or any facility necessary for the control, collection and disposal of all surface and subsurface water encountered in the performance of the contract work. All excavations shall be kept dry at all times and all construction work shall be performed "in the dry", unless otherwise authorized or directed by the Owner. Sedimentation discharge into storm drains shall be adequately controlled with hay bales or other approved methods.

- B. Any damage to existing facilities or new work resulting from the failure of the Contractor to maintain the work areas in a dry condition shall be repaired by the Contractor, as directed by the Owner, at no additional expense to the Owner. Pumping shall be continuous where specified or directed or as necessary to protect the work and to maintain satisfactory progress.
- C. Where cofferdams are necessary so that the work may be performed in the dry, the Contractor shall design, furnish, install, maintain and remove all such cofferdam facilities. Cofferdams shall be designed to withstand all imposed loads and to prevent injury to persons or damages to existing structures and property and to the work.
- D. Due to the age of the distribution system, the PWSB makes **no** warranty as to the completeness of water shutdowns from open pipes during the work. It is the contractor's responsibility to provide an adequate number and proper type of pumps to dewater the excavations to prosecute the work. There will be no extra payments to the contractor for delays as a result of inadequate dewatering.

3.02 WORKMANSHIP

- A. The Contractor's pumping and dewatering operations shall be carried out in such a manner that no loss of ground will occur. All pipelines or structures not stable against uplift during construction or prior to completion shall be thoroughly braced or otherwise protected against movement or damage.
- B. Water being disposed of by the pumping and dewatering operations shall be disposed of in such a manner to avoid pollution of existing water courses, injury to persons or public or private property or to the work completed or in progress. Dewatering shall be accomplished by approved methods which have a background record of successful dewatering of similar excavations and subsurface conditions expected to be encountered in the work.
- C. Cofferdams shall be installed to sufficient depths to allow a reasonable depth of below-grade excavation below the work to be constructed. They shall be as watertight as necessary for the construction of the work in the dry. They shall be of such dimensions as to give sufficient clearance for construction and inspection of the work and to permit installation of all necessary dewatering facilities.
- D. The Contractor shall be solely responsible for the design, construction, adequacy and safety of all cofferdam facilities and for any injury or damage caused by the installation or failure of the cofferdam facilities. Cofferdams, including all sheeting and bracing required, shall be removed by the Contractor after completion of the permanent construction unless otherwise directed by the Owner.
- E. The Contractor shall be responsible for providing and maintaining all ditching, grading, sheeting and bracing, pumping and appurtenant work

for the temporary diversion of water courses and protection from flooding as necessary to permit the construction of work in the dry.

- F. Upon completion of the contract work in each construction area, the Contractor shall remove all temporary construction and shall do all necessary earthwork and grading to restore the areas disturbed to their original condition or to such other conditions as indicated or directed by the Owner.
- G. Water shall not be permitted to flow into or through excavations in which work is under way or has been partially completed. The Contractor shall not restrict or close off the natural flow of water in such a way that ponding or flooding will occur and shall at all times prevent flooding of public and private property. All damages resulting from flooding or restriction of flows shall be the sole responsibility of the Contractor, at no additional expense to the Owner.

3.03 METHOD OF MEASUREMENT

- A. The work and materials required by this Section of the Specifications will not be measured separately for payment.

3.04 BASIS OF PAYMENT

- A. No separate payment will be made for work required under this Section of the Specifications for "Dewatering, Control and Diversion of Water" and necessary related work. Compensation for such work shall be considered to be included in the prices bid for other items of the proposal.

END OF SECTION

SECTION 02486 - RESTORATION OF LAWNS AND RIGHT-OF-WAY AREAS

PART 1 - GENERAL

1.01 SCOPE OF THE WORK

- A. The work covered under this section of the Specifications consists of the furnishing of all labor, equipment, materials and appurtenances and performing all operations in connection with restoration of lawns and right-of-way areas disturbed by the construction activities performed under this contract, complete in accordance with the Specifications, the Drawings, and as directed by the Owner.
- B. The work shall also include stripping; stockpiling; hauling, handling and rehandling of topsoil; maintaining and protection of stockpiled topsoil; preparation of subgrades; spreading, compacting, grading and replacing deficiencies in quantities of topsoil; protection of completed topsoiled areas; raking, rolling, seeding, sodding, watering and maintenance of all seeded or sodded areas, and all other work incidental and necessary for the satisfactory completion of the work included under this section of the Specifications.
- C. All work required by this section of the Specifications shall be performed immediately following trench backfilling operations or as soon thereafter as weather conditions will allow through each individual lot except as limited by paragraph 1.03 of these Specifications. If this work is not performed as stated above or as directed by the Owner, the Owner may order the work done by others and the cost of said work shall be charged to the Contractor.

1.02 RELATED WORK DESCRIBED ELSEWHERE

- A. Earth Trench Excavation and Backfill Section 02211

1.03 PLANTING SEASON

- A. The sowing of seed shall be done only within the season extending from April 5th to May 25th and August 25th to September 24th, except at such times therein as the Owner may deem inadvisable because of weather or other conditions, and except as otherwise herein specified. In the event that seasonal and other conditions permit, and upon approval of the Owner, seeding may start earlier and/or be continued later than the specified dates. The sowing of seed shall be started on all areas during the first planting season after the areas have been released to the Contractor for lawn operations. The preparation of lawn areas shall not start until immediately preceding the season for seeding, except that topsoil may be spread at the option of the Contractor, provided that it be thoroughly loosened to its full depth and brought to a friable, mellow condition before the seed bed is further prepared.
- B. Sodding shall be installed in the Fall from August 25th to October 1st, or in the Spring between April 1st and May 15th unless otherwise approved by the Owner.

- C. Deciduous Plants shall be planted only when dormant; before leaves appear in the Spring or subsequent to their loss in the Fall, unless otherwise specified by the Owner.
- D. Evergreen Plants shall be planted in the Spring, until the time when new growth begins to take place, and from August 21st to October 15th.

1.04 PROTECTION OF TREES

- A. All trees, except those approved by the Owner to be removed for construction, which are subject to damage in conjunction with this contract shall be protected by wood planking, wrapping or whatever means which might become necessary or as directed by the Owner. Any tree to be removed and replaced after construction, shall be bagged, balled, stored, and maintained in a safe condition, pending replanting. One (1) year guarantee will commence from the day of replanting.
- B. No backfill of any nature shall be placed by the Contractor above the root spread of a tree or plant which it is desired to preserve until a fill of porous material not less than three inches in depth, or as directed by the Owner, and a mulch layer have first been placed above its roots.
- C. Where tree root protection is ordered, the area to be protected shall be thoroughly cleaned of all vegetation. Porous material shall then be spread loosely over the area to a depth ranging from three to twelve inches. On top of the porous material, a mulch layer shall be spread, over which a layer of fill material acceptable to the Owner shall be placed.
- D. Care shall be taken that trees or shrubs which are to be preserved in place are not scarred or damaged by the operations under this item. The root area to be protected shall be the area of ground surface lying within the periphery of the tree or as directed by the Owner.

1.05 ESTABLISHMENT

- A. At all times adequate protection shall be provided for all restored areas against trespassing or damage by others. The moving of heavy equipment or materials over the restored areas shall be avoided as far as possible, but if necessary, must be done on planks.
- B. The Contractor shall properly care for all lawn areas by watering, weeding, mowing, rolling, trimming and edging, and by performing any other necessary operations of maintenance. All areas and spots that do not show a prompt "catch" shall be reseeded at intervals of 10 days which shall continue until a good growth of grass is established over the entire restoration area. The methods pursued in the renewal or replacement of disturbed areas shall be as specified.

Maintenance shall immediately follow the accomplishment of planting operations or the accomplishment of any other unit of work so specified, and shall continue for a period of sixty days after the close of the

specified planting season during which the last planting operations or lawn operations were accomplished, and if necessary, shall continue further until the requirements of the above are fulfilled. No requirements of this specification shall be interpreted to relieve the Contractor of the responsibility of maintenance as outlined.

1.06 GUARANTEE AND REPLACEMENT

- A. The Owner will not accept lawn areas until the completion of all the work required under this project.
- B. Sodded areas shall be guaranteed for a period of one (1) year after acceptance by the Owner, and shall be alive and in satisfactory growth at the end of the guarantee period. At the end of the guarantee period, upon written request by the Contractor, the Owner will inspect sodded areas. Any sodded area required under this Contract that is dead or not in satisfactory growth, as determined by the Owner, shall be removed and replaced as soon as conditions permit, during the normal planting season. In case of any question regarding the condition and satisfactory establishment of a rejected area, the Contractor may elect to allow such sodded areas to remain through another complete growing season at which time the rejected areas, if found to be dead, or in an unhealthy or badly impaired condition, shall be replaced. All replacements shall be of the same kind specified. They shall be furnished and planted as specified; the cost shall be borne by the Contractor, except for possible replacements resulting from removal, loss or damage due to occupancy of the Project in any part, or vandalism.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. All topsoil needed to complete the work shall be provided by the Contractor by processing topsoil obtained in stripping and stockpiling operations during construction at the site; and/or obtained from an approved source off the site at no additional cost to the Owner. The topsoil shall be natural, friable soil possessing characteristics of the topsoils of the vicinity which produce heavy growth of crops, grass or other vegetation and shall be light to dark brown in color. Before the soil is used, it shall be reasonably free from subsoil, clay, lumps, stones, stumps, roots and similar objects, any of which are larger than one inch in diameter, brush, objectionable weeds or other litter, excess acid or alkali or any other material or substance which may be harmful to plant growth or a hindrance to grading and maintenance operations.
- B. Commercial fertilizer shall be a complete fertilizer with 30 to 40 percent of the nitrogen derived from natural organic sources and containing in available form by weight 8 percent nitrogen, 6 percent phosphoric acid and 4 percent potash. The commercial fertilizer shall be delivered to the site in the original unopened containers which shall bear the guaranteed statement of analysis of the manufacturer.

- C. Lime shall be ground, dolomitic, agricultural limestone and shall contain a minimum of 85 percent total carbonates. It shall be ground to a fineness so that 80 percent will pass through a No. 100 sieve and 95 percent through a No. 60 sieve. A certificate from a reputable producer of ground, dolomitic agricultural limestone attesting that his product meets the above specifications shall be submitted by the Contractor.
- D. Lawn seed shall be fresh, clean, new crop seed. Seed may be mixed by an approved method on the site or may be mixed by the dealer. If the seed is mixed on the site, each variety shall be delivered in the original containers which shall bear the guaranteed analysis of the dealer. If the seed is mixed by the dealer, the Contractor shall furnish to the Owner the guaranteed statement of the dealer of the composition of the mixture and percentages of purity and germination of each variety. Grass seed for the areas to be seeded shall be composed of the following seeds mixed in the proportions by weight and testing the minimum percentages of purity and germination as indicated herein.

| <u>Type of Seed</u> | <u>Proportion by Weight Percent</u> | <u>Percent of Purity</u> | <u>Percent Germination</u> |
|---|---|------------------------------|--------------------------------|
| <u>1. Lawn or Developed Areas</u> | | | |
| Penn Lawn Chewings | | | |
| Fescue | 40 | 95 | 88 |
| Pennstar Bluegrass | 25 | 95 | 90 |
| Merion Bluegrass | 25 | 95 | 90 |
| Perennial Ryegrass | 10 | 98 | 90 |
| <u>2. Field or Partially Cleared Forested Areas</u> | | | |
| Alsike Clover | 5 | 98 | 85 |
| Creeping Red Fescue | 45 | 98 | 85 |
| Kentucky - 31 Fescue | 30 | 98 | 85 |
| Perennial Rye | 20 | 95 | 90 |

- E. All sod shall be well-established, good quality, permanent lawn grass, grown in open ground on a recognized sod farm. It shall be strongly rooted, containing seventy-five (75) percent Merion Bluegrass (*Poa pratensis merion*) and twenty-five (25) percent Pennlawn Fescue, free of pernicious weeds and coarse, burned or bare spots. Grass shall have been mowed to a height of two (2) inches before lifting, and shall have a uniform soil thickness of one and one-half (1-1/2) inches. The Contractor shall furnish the Owner with an adequate sample for inspection and approval before any sod is delivered to the Site.
- F. Mulch shall be of any of the following material, or any approved locally available material other than these specified. Mulch material which contains an excessive quantity of matured seed of noxious weeds or other species will not be acceptable. Straw or other mulch material which is fresh and excessively brittle, or which is in such an advanced stage of

decomposition as to smother or retard the growth of grass, will not be acceptable.

1. Straw: Straw shall be the threshed straw of oats, wheat, barley, rye, flax beans or peas.
 2. Hay: Hay shall be cured, dried, and shall be of such types as native hay, Sudan-grass hay, broom-sedge hay, and grass clippings.
- G. After subgrades of the areas have been satisfactorily brought to the proper condition, elevations and contours, and immediately prior to placing and spreading the topsoil, the subgrade shall be loosened by discing, scarifying or other approved method, to a depth of approximately 3 inches to permit bonding of the topsoil to the subgrade.
- H. Topsoil shall be placed only when seeding can follow within a reasonable time. The topsoil shall be uniformly distributed and compacted on the areas designated to be seeded in sufficient depth to compensate for any shrinkage. The average thickness of the compacted topsoil shall be not less than 6 inches. The surfaces of the areas shall finish evenly with adjacent undisturbed surfaces. They shall be rolled with a hand roller weighing not more than 100 pounds per foot of width. During the rolling, all depressions caused by settlement or rolling shall be filled with additional topsoil and the surfaces shall be regraded and rolled until they present a smooth and uniform finish free from depressions where water will stand and with all surfaces at the required grade. Topsoil shall not be placed when the topsoil or subgrade is frozen, excessively wet, extremely dry or in a condition which would be detrimental to the operations. All areas shall be protected and maintained in a proper and satisfactory condition until they are fertilized and seeded.

PART 3 - EXECUTION

3.01 LOAMING

A. Preparation:

Prepare the subgrade of all areas on which loam is to be placed at the proper elevation free of depressions and irregularities. Clear all vegetation, stones, roots, brush, debris, and any other material which might interfere with or be harmful to plant growth.

B. Placing Loam:

Loaming shall be performed only when it can be followed within a reasonable time by seeding. The loam shall be uniformly distributed and compacted on the areas designated to be grassed in sufficient depth to compensate for any shrinkage. The surfaces of the loamed areas to be sodded shall be rolled with a hand roller weighing not more than 100 pounds per foot of width. During the rolling, all depressions caused by settlement or rolling shall be filled with additional loam and the surfaces shall be regraded and rolled until they present a smooth and

uniform finish, free from depressions where water will stand and with all surfaces at the required grade. Loam shall not be placed when the loam or subgrade is frozen, excessively wet, extremely dry or in a condition which would be detrimental to the operations. All loam areas shall be protected and maintained in a proper and satisfactory condition until the subsequent operations.

C. Fine Grading:

The soil surface shall be brought to the required finished grades free from ridges and depressions, through successive stages of light rolling, fine grading and raking operations. The surfaces shall be cleared of all objectionable weeds and shall be free from stone, roots, or objects larger than one inch in diameter and other materials which would be a hindrance to planting operations or to plant growth. A finely pulverized soil surface shall be obtained.

3.02 SEEDING

- A. Before starting work, approved types of equipment shall be on hand and it shall be demonstrated that the application of lime, fertilizer and seed will be made at the specified rates.
- B. Lawn grass mix as specified herein, shall be used for seeding and sodding in all existing lawn areas disturbed by this construction. All other disturbed areas unless otherwise superseded by previous right of way easement agreements shall be seeded with field grass mix, as specified herein.
- C. The seed bed shall be brought to the required finished grades, free from ridges and depressions, through successive stages of light rolling, fine grading and ranking operations. The surfaces shall be cleared of all objectionable weeds and shall be free from stone, roots or objects larger than one inch in diameter and other material which would be a hindrance to planting operations or to plant growth. A finely textured seed bed shall be obtained.
- D. Lime shall be spread uniformly over the areas to be seeded at a rate of 2,000 pounds per acre. Fertilizer shall be spread uniformly over the areas to be seeded at a rate of 900 pounds per acre. Each material shall be worked independently into the top 3 inches of soil by discing, harrowing or other acceptable methods. Sticks, stones and debris shall be removed from the areas and satisfactorily disposed of.
- E. After the areas to be seeded have been prepared as specified herein, the specified seed mixture shall be uniformly sown thereon at a rate of 4 pounds per 1,000 square feet. Hand seeders, power-drawn drills or other approved equipment shall be used. After sowing, the seed shall be lightly covered and the seeded areas compacted by rolling.

All seeding shall be done only at times approved by the Owner.

No seeding shall be permitted after a rain unless the surface of the ground is loosened or when the velocity of the wind exceeds a gentle breeze or about five miles an hour. Extreme care shall be exercised during seeding and raking so that no change in grade is made and so that the seed is not raked from one spot to another.

3.03 MULCHING

- A. The mulch shall be spread uniformly in a continuous blanket, using 2 tons per acre. If the mulching material is too long and brittle for proper spreading, it shall be cut to length of not less than 8 inches and watered as needed before spreading. The mulch shall be spread by hand or other approved methods. Mulching shall be started at the windward side of flat areas, or at the upper part of steep slopes and shall continue uniformly until the area is completely covered.
- B. On all slopes 3 on 1 or steeper, mulch shall be secured to the soil by means of staking and string line, by brush, by a shallow covering of earth or by pressing mulch into the soil at approximately 1-1/2 foot intervals with a spade or other approved tool or by other suitable means which will not be detrimental to subsequent maintenance.

3.04 SODDING

- A. Care shall be exercised at all times to retain the soil on the roots of the sod during the process of transplanting. Dumping from vehicles will not be permitted. The sod shall be planted within twenty- four hours from the time it is harvested unless it is tightly rolled or stored roots-to-roots in a satisfactory manner. All sod in stacks shall be kept moist and shall be protected from exposure to the sun and from freezing. No storage longer than five days will be permitted. Sod which becomes dried out or does not meet the specifications will be rejected.
- B. There shall be a minimum of four inches, after tamping, of topsoil under all sod unless otherwise specified. Excavations or trenches shall be made to a sufficient depth below the finished grade of the sod to accommodate the depth of topsoil as specified and the thickness of sod as specified. Fertilizer shall be applied at a rate to provide 100 pounds of nitrogen per acre unless fertilizer has been applied under another item in this contract to the topsoil in the sod bed. Lime, although not required in sodbed preparation, will be permitted in the sodbed if applied in a previous operation. Fertilizer applied shall be incorporated with the topsoil to a depth of at least two inches before the sod is laid, unless otherwise specified or approved. Incorporation shall be accomplished by discing, harrowing, drilling, raking, or other approved means.
- C. The soil on which the sod is laid shall be reasonably moist and shall be watered, if so directed. The sod shall be laid smoothly, edge to edge, and all openings shall be plugged with sod. In drainage-ways and where continuous solid sodding is called for on the plans, the sod shall be

laid with their longest dimensions parallel to the contours. Such sodding shall be begun at the base of slopes or grades and the sodding progress in continuous parallel rows working upward. Vertical joints between such sod shall be staggered. All sod shall be laid to the grades formed with special care at the junction of drainage-ways. Immediately after the sod is laid, it shall be pressed firmly into contact with the sodbed by tamping, rolling, or by other approved methods so as to eliminate all air pockets, provide true and even surfaces insure knitting and protect all exposed sod edges but without displacement of the sod or deformation of the surface of the sodded areas and watered at the rate of 5 gallons per square yard of sodded area unless otherwise directed.

- D. Sod shall be held in place by stakes in all drainage-ways, on all slopes steeper than 4:1 and elsewhere where specified or as directed. Pegging shall be done immediately after tamping. At least one stake shall be driven through each sod to be staked, and the stakes shall be not more than two feet apart. Stakes shall have their flat sides against the slope and be driven flush.
- E. Excess sod or excess soil resulting from excavations or trenching shall be disposed of as approved. Excess soil shall not be left to form a ridge adjacent to the sodded area or sodded strips. No payment will be made for rejected or excess sod which is not laid.

3.05 METHOD OF MEASUREMENT

The work and materials required by this Section of the Specifications will not be measured for payment.

3.06 BASIS OF PAYMENT

No separate payment will be made under this Section of the Specifications for restoration of lawns and right of way areas, and necessary related work. Compensation for such work as shown on the plans or as required to complete the work shall be considered to be included in the prices bid for other items in the Proposal.

END OF SECTION

SECTION 02513 - PAVEMENT RESTORATION

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work Included:

Work under this section includes furnishing all labor, equipment, materials, and appurtenances, and performing all operations in connection with the milling or placing of temporary and permanent bituminous concrete pavement on gravel or concrete base for roadways, sidewalks, and driveways as shown on the Drawings, as specified in the Bid Proposal or as directed. All existing pavement, striping, curbing and street fixtures damaged or displaced as a result of the construction operations shall be restored in accordance with the requirements for this Section.

B. Related Work Specified Elsewhere:

- | | |
|---|---------------|
| 1. Cleaning | Section 01710 |
| 2. Earth Trench Excavation and Backfill | Section 02211 |
| 3. Miscellaneous Concrete Work | Section 03310 |

1.02 REFERENCES

A. All work specified in this Section shall conform to the specifications of the "Standard Specifications for Road and Bridge Construction" Department of Transportation, Division of Public Works, State of Rhode Island, amended December 2010 with latest revisions and addenda, including latest supplements, hereinafter called the "Standard Specification." All reference to measurement and payment with said "State Standards" shall not apply.

PART 2 - PRODUCTS

2.01 CRUSHED PROCESSED GRAVEL

A. Conform to Article M.01.09, Column II, of the Standard Specifications, and to the requirements listed in Section 02211 of the Contract Specifications.

2.02 PLANT MIX BITUMINOUS CONCRETE PAVEMENT

A. Conform to Section M.03.01 of the Standard Specifications.

B. Surface Course

1. Roadways Class I-1.
2. Sidewalk Class I-2.

2.03 ASPHALT CEMENT

- A. Conform to Section M.03.02.1 of the Standard Specifications.

2.04 AGGREGATE

- A. Plant Mix Bituminous Base

Conform to Section M.03.02.3 of the Standard Specifications.

- B. Flexible Pavements

Conform to Section M.03.02.2 of the Standard Specifications.

- C. Filler

Conform to Section M.03.02.3 of the Standard Specifications.

2.05 TACK COAT

- A. SS-1, SS-1h, CSS-1, or CSS-1h conforming to Section 403 of the Standard Specifications.

- B. Application rate of 0.05 gallons per square yard.

2.06 PORTLAND CEMENT CONCRETE BASE

Conform to Sections 601 and Section 602 of the Standard Specifications

PART 3 - EXECUTION

3.01 SUB-GRADE PREPARATION

- A. Prepare subgrade of trenches and such other places as field conditions require by shaping and compacting to proper grade. Remove all soft and yielding material from the subgrade and replace with suitable material, compact and prepare. Compact thoroughly using approved types of rollers or tampers. Ensure that all areas are stable and dry.
- B. Saw cut back edges of existing pavement along even lines as necessary to obtain undisturbed, clean and sound vertical edges for placement of gravel base course, tack coat and temporary pavement.
- C. Do not store or stockpile materials on the subgrade.

3.02 GRAVEL BASE PLACEMENT

- A. On the approved prepared subgrade, place approved crushed processed gravel base material in successive 6" maximum compacted layers to the depth indicated on the Drawings for the full width of the disturbed cross section. Do not place fill on muddy or frozen subgrade or until subgrade is approved by the Owner.
- B. During placing and/or compacting operations upon earth, the moisture content of material in the layers being compacted shall be near optimum

and shall be as nearly uniform as practicable throughout the layer. Water shall be added in such amounts as the Owner may consider necessary to secure satisfactory compaction. In general, the moisture content of the material being placed and compacted shall be maintained at approximately optimum condition as determined in accordance with ASTM Standard D1557.

- C. Perform all compaction with approved equipment well suited to location and material being compacted. Use heavy vibratory rollers where heavy equipment is authorized.
- D. Do not operate heavy equipment closer to foundations than a horizontal distance equal to height of backfill above bottom of foundation. Compact remaining area with hand tampers suitable for material being compacted. Place and compact backfill around pipes with care to avoid damage.
- E. Compact fill materials to 95% maximum density.
- F. Finish surface of crushed processed gravel base course not less than 1-1/2" below and parallel to the proposed grades and cross sections of the temporary pavement.

3.03 CONCRETE BASE

All loose or broken concrete and patches in the concrete which have been made with materials other than concrete shall be removed and replaced to the depth of the existing base with concrete in accordance with the Standard Specification. All cracks in the base shall be cleaned with compressed air and filled with SS-1 liquid asphalt emulsion. Care shall be taken not to overfill the cracks. All excess liquid asphalt shall be completely removed. The repaired surface and adjacent concrete shall be thoroughly cleaned, and a light tack coat applied at the rate herein specified.

3.04 SURFACE CONDITIONS

A. Inspection:

- 1. Prior to commencing work under this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence.
- 2. Verify that bituminous concrete pavement may be installed in strict conformance with the drawings and specifications, all pertinent codes and regulations, and all pertinent portions of the referenced standards.

B. Discrepancies:

- 1. All discrepancies shall immediately be brought to the attention of the Owner.
- 2. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

3.05 TEMPORARY PAVEMENT PLACEMENT

- A. On the approved crushed processed gravel base course, place temporary pavement surface course of 2" minimum plant-mixed bituminous concrete (hot mix) Class I-1 or I-2, on streets or sidewalks and such other places as field conditions require, as directed, to the compacted thickness and layers specified and/or detailed on the Drawings. Finish flush with the top of the adjacent undisturbed pavement and conform with the cross-section of existing pavement or as directed. Maintain temporary pavement flush with adjacent undisturbed pavement as settlement of trench backfill occurs and until the permanent surface is placed. Temporary pavement shall be maintained in place for a period of not less than **90 days** from the date of placement or until such time as the Engineer determines that the settlement of pavement has stopped.
- B. In highly traveled roadways, temporary pavement shall be placed on all backfilled trenches within 24 hours of backfilling. No backfilled trenches shall be left unpaved over weekends and/or holiday periods. At any one time during the construction work on any particular roadway, the length of an unpaved backfilled continuous trench shall not exceed 1000 linear feet or 3000 linear feet in total for the entire project.
- C. Upon approval by the Owner, cold patch may be temporarily substituted for the hot-mix bituminous concrete required for temporary pavement. No payment shall be made for the installation of cold patch. All areas that have been patched with cold-mix shall be repaved with the temporary hot-mix bituminous concrete within one week after the work. When patching the trench with hot-mix bituminous concrete, all of the cold-mix bituminous materials shall be first removed, and the gravel subgrade shall be regraded and additional gravel added as necessary.
- D. Cold-laid plant mixes shall be of the Precoated Macadam Aggregate Type of the Macadam aggregate Type conforming with Asphalt Institute Specification CL-1 and CL-2, respectively. Rapid curing (RC-3 and RC-4) and Medium Curing (MC-4 and MC-5) cut back asphaltic primers shall be used, mixed with an asphalt cement of 85-100 penetration and hydrated lime. Aggregate gradation shall be between the limits of 1-inch and No. 8 sieve with high per cent passing 3/8-inch sieve. The mixture shall consist of from 90.0 to 93.0 per cent of mineral aggregate for CL-1 and 94.5 to 96.5 per cent for CL-2. Cold-laid emulsified asphalt plant-mix may also be used subject to approval of samples by the Owner. The surface of the base course shall be clean, dry and free from frost when paving operations are to start and shall be maintained in that condition. The surface of the temporary pavement shall conform to the existing pavement.

3.06 REMOVAL OF TEMPORARY PAVEMENT

- A. Remove all temporary pavement material in its entirety and the partial thickness of crushed processed gravel base specified and/or detailed on the Drawings. Dispose of all removed materials to an approved dumping site and maintain the adjacent pavement areas clear and clean. Use care in removing materials so as not to damage gravel base or the adjoining pavement. Maintain base course in an approved condition for placing of the permanent pavement. Saw cut back edges of existing pavement as

necessary to obtain undisturbed, clean and sound vertical edges for application of permanent pavement.

3.07 PERMANENT PAVEMENT PLACEMENT

- A. Place the bituminous material prime coat of asphalt cement on the approved crushed processed gravel base course or concrete base and on the prepared and approved existing pavement edges and surface. Rate of application shall be 0.05 to 0.10 gallons per square yard.
- B. On the approved crushed processed gravel base course or concrete base, place bituminous concrete pavement consisting of 2-inches (minimum) of bituminous concrete (Hot-Mix) Class I-1 surface course and a bituminous concrete binder coarse at a compacted minimum 2-inch thickness (4-inches total), and for state roads or city roads with concrete roadbase an additional 5-inches of bituminous base course or replacement of the concrete roadbase as directed by the RIDOT in accordance with the Standard Specification. The permanent and undisturbed pavement surface shall conform to the existing cross sections of the existing pavement or as otherwise directed. On city or town roads where directed, the permanent pavement shall be placed to the curb line and shall include the area between the trench and the curb.
- C. For Bituminous concrete sidewalks, the surface course shall be a fine "sidewalk" mix (Class I-2) and a bituminous concrete binder coarse at a compacted minimum 2-inch thickness but shall be at least equal to the existing cross sections of the existing pavement or as otherwise directed.
- D. All permanent pavement shall be placed between 90 days and 120 days following the date of the temporary pavement placement.

3.08 REMOVING BITUMINOUS PAVEMENT BY COLD PLANING **NOT IN THIS CONTRACT**

- A. This work consists of the removal of bituminous material using cold planing or grinding methods to a depth of 1-1/2" to 3" as specified by the Engineer, all in accordance with these Specifications.
- B. The equipment for removing the bituminous pavement shall be a power operated planing machine or grinder capable of removing a layer of bituminous material. The equipment shall be capable of accurately establishing profile grades by referencing from either the existing pavement or from an independent grade control and shall have a positive means for removing excess material from the surface and for preventing any dust from the operation from escaping into the air. The equipment furnished by the contractor shall be in good repair and shall be maintained so as to produce a clean cut to the pavement at all times.
- C. The cold planed surface shall conform generally to the grade and cross slope required and be free from being torn, gouged, shoved, broken or excessively grooved. The surface shall be free of imperfections of workmanship that will prevent the surface from being resurfaced with new pavement following this operation. Surface texture shall be rough grooved or as specified by the Engineer, and in all cases shall be acceptable to traffic in the event resurfacing is delayed. No asphalt cuttings shall remain on the project at the end of the day. All asphalt

cuttings shall become the property of the contractor and shall be removed and legally disposed of by the contractor.

3.09 BITUMINOUS SURFACE COURSE OVERLAY 1-1/2" **NOT IN THIS CONTRACT**

- A. This work shall consist of placing a friction course on prepared, sound, dense surfaces of bituminous concrete at the locations and to the thicknesses indicated on the Plans or as directed by the Engineer, all in accordance with these specifications and as described in section 402 of the "Standard Specifications for Road and Bridge Construction" Department of Transportation, Division of Public Works, State of Rhode Island, latest revision.
- B. Bituminous Surface Course Overlay shall be performed in the following general manner:
1. In the event that the RIDOT requires or the Engineer determines that prior to placing a Bituminous Surface Course Overlay, the surface condition requires the removal of bituminous material using cold planing or grinding methods as described above in section 3.08, the work shall be performed as described in section 3.08.
 2. Mechanical street sweeping and general cleaning of the area to receive the Bituminous Surface Course Overlay shall be performed as directed by and to the satisfaction of the Engineer, all as described in section 01710 - Cleaning, of the Specifications.
 3. Application of an Asphalt Emulsion Tack Coat - This work consists of furnishing, delivering, and placing a liquid asphalt tack coat on bituminous concrete or portland cement concrete, prior to the placement of a bituminous concrete overlay, all in accordance with these specifications. The asphalt emulsion shall be SS-1, SS-1h, CSS-1, or CSS-1h. Application of the asphalt emulsion tack coat shall be by means of a pressure distributor capable of producing a uniform and continuous fine spray, through multiple nozzles, resulting in a uniform continuous coat over the section to be treated. Any puddles of tack coat must be squeegeed or swept out. The application rate shall be .05 gallons per square yard. Surfaces of curbs, gutters, vertical faces of existing pavements, and all structures to be in contact with the bituminous mixture shall be given a thin, even coating of Asphalt Emulsion Tack Coat. Care shall be taken to avoid the splattering of surfaces which will not be in contact with the bituminous mixture.
 4. Bituminous Surface Course Overlay mixing, placing, and finishing of bituminous surface course shall conform to the applicable requirements of Section 401 of the "Standard Specifications for Road and Bridge Construction" Department of Transportation, Division of Public Works, State of Rhode Island, latest revision. The mixture of the Bituminous Surface Course 1-1/2" Overlay material shall be "Class I-1" mix as specified in section M.03 of the Standard Specifications for Road and Bridge Construction" Department of Transportation, Division of Public Works, State of Rhode Island, latest revision. The following additional conditions apply:

- a. Both the mixing temperature and the temperature of the friction course at the time of placement shall be 240° F to 280° F.
- b. The mixture shall be placed as soon as possible after completion at the plant. It shall be placed within 60 minutes from the time of its arrival at the job site, subject to the specified placement temperature range.
- c. Unless otherwise shown on the Plans, mixtures shall be spread by means of a mechanical self powered paver capable of spreading the mixture true to line, grade, and crown set by the Engineer. When laying mixtures, the paver shall be capable of being operated at forward speeds and proper thicknesses consistent with the satisfactory laying of the mixture. Bituminous pavers shall be self contained, power propelled units, provided with activated vibratory screed and solid vibratory screed extenders and capable of spreading and finishing courses of bituminous plant mixed material in lane widths applicable to the typical section and thickness as specified. The screed and screed extenders shall vibrate while placing the mixture and shall effectively produce a finished surface of the required evenness and texture without tearing, shoving, or gouging the mixture. The screed and screed extenders shall be heated if necessary to maintain the bituminous mixture at the required placement temperature.
- d. When placed on a newly reconstructed surface, the thickness shall be 1-1/2" + 1/4" unless otherwise approved by the Engineer. When used to overlay an existing roadway, the thickness shall be a minimum of 1" and a maximum of 1-3/4" to accommodate for surface irregularities. Spreading of the mixture shall be performed carefully and the operation shall be as continuous as possible. Particular attention shall be given to the joints and any irregularities shall be removed before compacting.
- e. After placement, the mixture shall be thoroughly and uniformly compacted with power rollers as directed by the Engineer. Compaction of the mixture shall be accomplished immediately after laydown when the temperature of the layer is 240° F + 20° F. Rolling shall continue until all roller marks are eliminated and the surface is of uniform texture and is true to line and grade. Static or vibratory steel wheel rollers or pneumatic tire rollers shall be employed. They shall be in good condition, capable of reversing without backlash, and shall be operated at speeds slow enough to avoid displacement of the bituminous mixture. The weight and type of rollers shall be sufficient to compact the mixture to the required density within the allowable time. The use of equipment which results in the excessive crushing of the aggregate is not permitted.

3.10 INFRARED BITUMINOUS SURFACE REPAIRS **NOT IN THIS CONTRACT**

- A. Upon completion and acceptance of the placement of permanent bituminous concrete pavement within the State roadways, as directed by the Engineer,

the Contractor shall proceed with the final repair. The final surfaces shall match the existing surface elevations precisely and shall provide proper drainage. The area of repair shall include the entire patch extending nine (9) inches to the outside of the joints formed by the patching of the trench. All areas to be repaired will be rectangular in shape.

- B. The Contractor performing the work must be fully qualified and properly equipped to complete this work expeditiously and in a manner satisfactory to the R. I. Department of Transportation.
- C. All materials must conform to the R. I. Department of Transportation Standard Specifications for Road and Bridge Construction Revision of 1971 and latest addenda.
- D. Infrared bituminous surface repair work in state highways shall be performed in the following general manner:
 - 1. Areas to be repaired shall be swept clean to remove all loose and foreign materials.
 - 2. An approved infrared heater not to exceed 15,000 BTU's per square foot per hour shall be positioned over the area to be repaired for a period of time required to soften the existing pavement to a depth of two or more inches. Oxidation of the pavement, caused by excessive heat, as determined by the Engineer, shall be avoided. The Contractor shall remove the unsuitable material in the event of oxidation and replace same with new bituminous concrete at his own expense.
 - 3. A recycling agent admixture in the amount approved by the Engineer will be added to the softened area after scarification and shall be raked to a workable condition.
 - 4. Any necessary additional bituminous concrete mix must be obtained from a suitable infrared storage unit required to keep asphalt at near-constant temperature throughout the working day. Under no circumstances is any asphalt mix to be used that registers a temperature of under 200 degrees F.
 - 5. After the paving mixture has been properly admixed and raked to grade, compaction shall be obtained by use of a steel wheeled roller of sufficient weight to establish a uniform density comparable to that of adjacent surface within the work area. Finished patch shall be level with no depression retaining water of any of its surface.
 - 6. Edges of the finished area shall be sealed with a suitable asphalt emulsion RS-1 or equal, around the perimeter of the newly repaired area.
 - 7. A cationic maltenes emulsion sealant shall then be hand sprayed on the patched area and adjacent edges at the approximate rate of one-tenth (0.1) gallon per square yard to seal the entire newly treated area. Sand will be spread over the newly sealed area.

3.11 ADDITIONAL REQUIREMENTS

- A. The repairing, replacing or restoring of driveway or sidewalk pavements damaged or disturbed as a result of the Contractor's operations shall be provided by the Contractor in accordance with the requirements specified herein for the respective type of pavement replacement and in a manner satisfactory to the Owner and the homeowner.
- B. All curbing, street fixtures, striping, and such other appurtenant work damaged or disturbed as a result of the Contractor's operations, shall be satisfactorily repaired or replaced, and restored by the Contractor in accordance with the Standard Specification, at no additional expense to the Owner. Traffic detector loops must be temporarily repaired within 72 hours. Permanent repair of the traffic detector loops shall include complete replacement after the permanent pavement repairs are completed.
- C. In case of settlement or other defects in replaced pavements, the Contractor shall cut out, replace, restore, or repair the damaged pavements in a manner satisfactory to the Owner, at no additional expense to the Owner. This Contract shall not be considered as complete until the replacement, restoration and repairs of pavements have been provided in a manner satisfactory to the Owner and in accordance with the requirements specified herein.
- D. Roads that have existing (rigid) concrete base shall be replaced in matching thickness with bituminous concrete except at locations designated by the Engineer or the RIDOT which shall be replaced with concrete road base in accordance with the Standard Specification.
- E. It shall be the responsibility of the Contractor to obtain from the controlling State and municipal authorities all required permits for cutting roadway pavements and to perform the work in accordance with all customs and requirements of the controlling authorities, in addition to those specified herein, at no additional expense to the Owner. All striping, curbing, street fixtures and such other appurtenant work damaged or displaced as a result of the Contractor's operations shall be repaired or replaced and restored by the Contractor in a manner satisfactory to the Owner and to the proper State or municipal officials as the case may be, at no additional expense to the Owner. In case of settlement or other defects in replaced pavements, the Contractor shall cut out, replace, restore or repair the damaged pavements in a manner satisfactory to and at no additional expense to the Owner. This contract will not be considered as complete until the replacement, restoration and repair of pavements have been provided in a manner satisfactory to the Owner in accordance with the requirements specified herein. The Contractor shall at all times maintain the completed work in a safe and satisfactory condition; all maintenance and repairs to the completed work shall be subject to the approval of the Owner and the controlling municipal and State authorities. All maintenance and repairs of the completed work shall be provided by the Contractor at no additional expense to the Owner. Equipment used in the work will be subject to approval and shall be maintained in a satisfactory condition at all times. Unless otherwise permitted, compaction shall be performed by use of suitable power rollers. Finished surfaces of new asphaltic surface courses shall finish even with adjacent existing pavement surfaces and be free from surface irregularities and shall be as approved.

F. Adjusting Structures to Grade:

All frames and gate boxes within the limits of this work shall be brought to finish grade utilizing materials specified under other sections of these specifications for this work. All new water gate valve boxes shall be raised plumb to finish grade without the use of risers. Iron risers may be permitted, where deemed necessary by the Engineer, for sewer, drainage, electric, gas, or telephone structures. Risers shall fit snug, flat, and flush to grade in order to prevent movement from traffic loads. All existing appurtenances damaged by the Contractor shall be replaced at no additional expense to the Owner.

G. Replacing Pavement Markings:

All existing pavement markings damaged within the limits of this work shall be replaced "in kind", as directed by the Engineer, and as specified in section T.20 of the Standard Specifications for Road and Bridge Construction" Department of Transportation, Division of Public Works, State of Rhode Island, latest revision. All existing pavement markings damaged by the Contractor shall be replaced at no additional expense to the Owner.

3.12 METHOD OF MEASUREMENT

A. Temporary Pavement:

The extent of temporary pavement will be that shown on the Drawings. Payment for Temporary Pavement will be measured and computed in square yards (S.Y.) as the product of the average actual measured width up to a maximum of five (5) feet times the actual length measured along the centerline of trench, including: saw cutting of existing pavement, placing crushed processed gravel base; furnish, placing and maintaining bituminous concrete pavement; and all incidentals necessary or otherwise required to satisfactorily place temporary pavement. The length on house service lines and hydrant branch trenches shall be measured from the center of the main to the curb face or pavement edge and the width shall be the average actual measured width up to a maximum of five (5) feet. CRUSHED PROCESSED GRAVEL will be measured separately for payment under that item in the Bid. Cold Patch will not be measured for payment.

B. Permanent Pavement:

The extent of permanent pavement will be that shown on the Drawings. Payment for Permanent Pavement on Town or State Roads will be measured and computed in square yards (S.Y.) as the product of the average actual measured width up to a maximum of eight (8) feet times the actual length measured along the centerline of the trench, including: saw cutting; removal of temporary bituminous concrete; furnishing and placing bituminous concrete base courses and overlay; and all incidentals necessary or otherwise required to satisfactorily place permanent pavement. The length on house service lines and hydrant branch trenches shall be measured from the center of the main to the curb face or pavement edge and the width shall be the average actual measured width up to a maximum of five (5) feet.

There are four Permanent Pavement items: a 1-1/2-inch curb-to-curb overlay item, a four (4) inch item for city roads, a nine (9) inch item for roads that have been resurfaced by the RIDOT or are more than 6 inches in thickness, and a concrete road base item for roads that require repair of existing concrete road base. Permanent Pavement will be measured for payment under the corresponding applicable item as determined by the Engineer in the field or as shown on the plans. Crushed processed gravel will be measured for payment under the item for "Crushed Processed Gravel".

C. Removing Bituminous Pavement By Cold Planing:

The quantity for Removing Bituminous Pavement By Cold Planing will be measured in square yards (S.Y.) based on an area that includes the total area actually removed and disposed of in a manner approved by and as directed by the Engineer.

D. Mechanical Street Sweeping:

Payment for Mechanical Street Sweeping will be measured for payment as the actual number of hours (Hrs.) worked in the operation of street sweeping by an approved full "size" mechanical street sweeper as described in Section 01710 - Cleaning. Only an approved type sweeper, and only when used at an approved or directed time and location will be measured for payment.

E. Application of an Asphalt Emulsion Tack Coat:

The application of Asphalt Emulsion Tack Coat will not be measured for payment and the cost will be included in the unit price for "BITUMINOUS FRICTION COURSE OVERLAY" as listed in the Bid.

F. Bituminous Surface Course Overlay 1-1/2":

Payment for Bituminous Surface Course Overlay 1-1/2" will be measured and computed in Tons based on the actual amount of asphalt installed and included in the 1-1/2" thick permanent pavement. Payment will also include all incidentals necessary or otherwise required to satisfactorily perform the 1-1/2" thick Bituminous Friction Course Overlay.

G. Infra-red Bituminous Surface Repairs:

Payment for Infra-red Bituminous Surface Repairs will be measured and computed in square yards (S.Y.) based on an area that includes the entire patch extending nine (9) inches to the outside of the joints formed by the permanent patch, which will also include all incidentals necessary or otherwise required to satisfactorily perform the infra-red bituminous surface repairs.

H. Concrete Base Road Repairs:

Payment for Concrete Road Base Repairs will be measured and computed in square yards (S.Y.) based on an area that includes the entire patch, which will also include all incidentals necessary or otherwise required

to satisfactorily perform the Concrete Road Base Repairs including reinforcing steel dowels, portland cement concrete and bituminous concrete (Hot-Mix) with Class I-1 surface course at a thickness to match the existing condition. All in accordance with the Standard Specification section.

I. Crushed Processed Gravel Subbase:

Payment for Crushed Processed Gravel will be measured and computed in cubic yards (C.Y.) based on the actual volume of crushed processed gravel used to properly complete the installation of temporary and permanent pavement as described in this specification.

J. Adjusting Structures to Grade:

The adjusting of new water valve road boxes to grade will not be measured for payment. The adjusting of gas valve road boxes to grade will not be measured for payment.

K. Application of Pavement Markings:

The application of Pavement Markings will not be measured for payment and the cost will be included in the unit price for "BITUMINOUS FRICTION COURSE OVERLAY", "PERMANENT PAVEMENT - 4", or "PERMANENT PAVEMENT - 9" as listed in the Bid.

3.13 METHOD OF PAYMENT

A. Temporary Pavement:

Payment for quantity measured as specified above will be made at the unit price bid for "TEMPORARY PAVEMENT 2-INCHES", as listed in the Bid.

B. Permanent Pavement:

Payment for quantity measured as specified above will be made at the unit price bid for "PERMANENT PAVEMENT 4-INCHES" or "PERMANENT PAVEMENT 9-INCHES", as listed in the Bid.

C. Removing Bituminous Pavement By Cold Planing:

Payment for quantity measured as specified above will be made at the unit price bid for "REMOVING BITUMINOUS PAVEMENT BY COLD PLANING", as listed in the Bid.

D. Mechanical Street Sweeping:

Payment for Mechanical Street Sweeping as specified above will be made at the unit price bid for "MECHANICAL STREET SWEEPING", as listed in the Bid.

E. Application of an Asphalt Emulsion Tack Coat:

There will be no separate payment for the application Asphalt Emulsion Tack Coat and the cost will be included in the unit price for "BITUMINOUS FRICTION COURSE OVERLAY" as listed in the Bid.

F. Bituminous I-1 Surface Course Overlay 1-1/2":

Payment for quantity measured as specified above will be made at the unit price bid for "BITUMINOUS I-1 SURFACE COURSE OVERLAY 1-1/2-INCHES", as listed in the Bid.

G. Infra-red Bituminous Surface Repairs:

Payment for quantity measured as specified above will be made at the unit price bid for "INFRARED PAVEMENT REPAIR - STATE ROADS", as listed in the Bid.

H. Concrete Base Road Repair:

Payment for quantity measured as specified above will be made at the unit price bid for "CONCRETE BASE ROAD REPAIR - STATE ROADS", as listed in the Bid.

I. Crushed Processed Gravel Subbase:

Payment for crushed processed gravel, will be made at the unit price bid for "CRUSHED PROCESS GRAVEL", as listed in the Bid.

J. Adjusting Structures to Grade:

No separate payment will be made for adjusting of new water valve road boxes to grade but the cost will be included in the unit price for "Furnish and Install Gate Valve and Box" or "Reinstall existing valve and Box" as listed in the Bid. No separate payment will be made for adjusting of gas valve road boxes to grade but the cost will be included in the unit price for "Bituminous I-1 Surface Course Overlay 1-1/2"".

K. Application of Pavement Markings:

There will be no separate payment for the application of Pavement Markings and the cost will be included in the unit price for "BITUMINOUS FRICTION COURSE OVERLAY", "PERMANENT PAVEMENT - 4", or "PERMANENT PAVEMENT - 9" as listed in the Bid.

L. Price Adjustment:

Due to the volatile nature of the price of liquid asphalt, the PWSB will make a one-time price adjustment on the unit price bid for the permanent pavement items as listed in the Bid. The purpose of this adjustment clause is to insure adequate compensation for the unpredictable cost of bituminous concrete. The price adjustment clause for increase and/or decrease is also made part of this contract to assure more realistic bidding and encourage competition. This adjustment will apply only to the 4" permanent, 9" permanent, and 1-1/2" overlay items. There will be no adjustment unless there is a documented increase or decrease of 10%

or more in the price of asphalt at the time of commencement of permanent paving and will be a one-time only adjustment. It is the responsibility of the Contractor to provide documented evidence of any increase in the cost of asphalt that would warrant a price adjustment.

Base Price : The base price is defined as a fixed price determined by the PWSB at the time of bidding.

Adjusted Price: The adjusted price is defined as the new price as determined by the Engineer at the time of commencement of the permanent paving operation.

Contract Price: The contract price is defined as the respective item bid price as listed in the contract.

Price Adjustment: The price adjustment will be determined by the variance between the Adjusted Price and the Base Price. Price adjustment will be made at the end of the paving work and be as determined by the Engineer.

END OF SECTION

SECTION 02615 - DUCTILE IRON WATER MAINS AND APPURTENANCES

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. The work covered under this section of the Specifications consists of the furnishing of all labor, equipment, materials, appurtenances, and performing all operations in connection with the installation of ductile iron water mains complete and the furnishing and installation of all other work by the Contractor, including, but not limited to pipe fittings, specials and accessories, testing and disinfection, jointing, tyton joint gaskets and jointing materials, and all other related and appurtenant work required for proper installation, in accordance with the Drawings and Specifications and as directed by the Owner.

B. Related Work Described Elsewhere:

- | | |
|---|---------------|
| 1. Earth Trench Excavation and Backfill | Section 02211 |
| 2. Gate Valves, Tapping Sleeves and Valves, Valve Boxes and Appurtenances | Section 02640 |
| 3. Fire Hydrants | Section 02644 |
| 4. Water Service Lines | Section 02650 |
| 5. Testing and Disinfecting Water Mains | Section 02710 |
| 6. Installation of Water Pipelines Systems | Section 02713 |

C. It is not intended that the Drawings shall show every pipe, fitting, specials and accessories, etc., but the Contractor shall be required to furnish, without additional charge, all material necessary to complete the pipeline systems in accordance with the best practice and intent of the Drawings and Specifications.

D. The Contractor shall be responsible for notifying the Pawtucket Water Supply Board 48 hours prior to any desired valve operations required for the work of this contract, the Contractor shall not operate any valves without the express permission of the Water Supply Board. The Owner will furnish personnel to operate all valves in the system without cost to the Contractor.

1.02 QUALITY ASSURANCE

- A. The Contractor shall furnish to the Owner manufacturer's notarized test reports and methods of test to show compliance with all specification requirements, and notarized Certificates of Conformance stating that all materials to be furnished under this section of the Specifications conform with all specification requirements, and each shipment of

fittings, joints and gaskets and accessories meet all requirements of the Specifications.

- B. The Contractor shall furnish to the Owner, when requested, manufacturer's written transcripts in accordance with Section 51-14 of AWWA Specification C151, latest revision.

1.03 SUBMITTALS

- A. Shop drawings shall be submitted for approval. They shall conform to the requirements of AWWA Specifications C153, C111 and C151, latest revision, and shall include complete dimensional, fabrication, and erection details, net weights, material lists, maintenance data and all other information required by the Owner.

1.04 PRODUCT INSPECTION, RECEIVING, HANDLING AND STORAGE

- A. The inspection, receiving, handling and storage of all materials shall conform in all respects to the requirements of AWWA Specification C600, latest revision, Section 2.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Ductile Iron Pipe to be furnished by the Contractor, shall conform in all respects to AWWA Specification **C151**, latest revision, to AWWA Specification **C104**, latest revision, and to the following additional requirements:
 - 1. Manufactured in United States of America
 - 2. Thickness Class: **52**
 - 3. Joint Type: Push-On Joints
 - 4. Interior Surface: Cement Lined, double thickness with Bituminous material seal coat
 - 5. Exterior Surface: Asphaltic Bituminous Coating approximately 1-mil thick.
- B. Fittings for water mains to be furnished by the Contractor shall conform in all respects to AWWA Specification **C153**, latest revision, to AWWA Specification **C104**, latest revision, and to the following additional requirements:
 - 1. Manufactured in United States of America
 - 2. Joint Type: Mechanical Joints
 - 3. Pressure Rating: **350 psi**
 - 4. Type of Iron: **Ductile Iron**
 - 5. Interior Surface: Cement Lined, double thickness with bituminous material seal coat
 - 6. Exterior Surface: Asphaltic Bituminous Coating, approximately 1-mil thick.
- C. The American Iron and Steel requirement in Section 424 of the Consolidated and Further Continuing Appropriation Act, 2015 (P.L. 113-

235) applies for this project. All iron and steel products used in the project shall be produced in the United States.

- D. Cement mortar lining for fittings shall conform in all respects to AWWA Specification C104, latest revision, except that lining thickness shall be twice that specified in AWWA Specification C104.
- E. Tyton gasket joints for pipe and rubber gasket joint, tee head bolts and hexagonal nuts for fittings, to be furnished by the Contractor, shall conform to AWWA Specification C111, latest revision.
- F. Flexible couplings and reducer couplings to be furnished by the Contractor shall be installed where required for connection of new pipe to existing pipe, as shown on the Drawings, as directed, or as otherwise required for the complete installation of the pipeline system. Where end-to-end connections of new and existing pipe are required, couplings specifically pre-manufactured for the connection of dissimilar sizes and types of pipe will be subject to the approval of the Owner. Couplings for smaller pipe size (16" or less) shall be Smith-Blair Style 441 with stainless steel hardware, or approved equal, and couplings for larger pipe sizes (greater than 16") shall be Smith-Blair Style 413 (different o.d.) with stainless steel hardware or approved equal. The Contractor shall be responsible for determining required types and sizes of all couplings to be used.
- G. Corporation stops to be furnished by the Contractor shall be installed where required to connect house services, replace existing 5/8" corporation stops, as shown on the drawings, as directed and as required to complete the work. Corporation stops are specified under Section 02650 "WATER SERVICE LINES".
- H. All pipe fittings, gaskets, accessories and appurtenances shall be new and unused.
- I. Joint restraint systems to be furnished by the Contractor when restraining, new to existing work shall be hot-dip galvanized steel. Joint restraint systems to be furnished by the Contractor when restraining new to new work shall be **MEGALUG** thrust restraint wedge, as manufactured by EBAA Iron, Inc. or equal.
- J. Bell joint clamps shall be Romac Style 526 joint leak clamp or equal.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Examine all pipe and fittings for cracks, flaws, or other defects. Remove defective pipe and fittings from the site. Pipe and fittings in which the lining has been broken, or loosened shall be replaced. Where damaged areas are small and readily accessible, the Contractor may be permitted to repair the lining at the discretion of the Owner.

3.02 PREPARATION

- A. Proper implements, tools and facilities, satisfactory to the Owner, shall be provided by the Contractor for the proper and satisfactory execution of the work.
- B. The interior of pipe and fittings shall be thoroughly cleaned of foreign matter before being lowered into the trench and shall be kept clean during laying operations.
- C. The trench bottom and bedding shall be shaped and compacted to give substantially uniform unyielding circumferential support to the lower quarter of pipe along the entire length of each pipe. Bell holes shall be excavated so that after placement only the barrel of the pipe receives bearing pressure from the trench bottom.
- D. Pipe, pipe fittings and accessories shall be handled, stored, installed, joined and protected by the Contractor in strict accordance with the printed recommendations of the manufacturer of the piping materials.

3.03 INSTALLATION

- A. The Contractor shall furnish to the Owner for his use, copies of the printed recommendations of the pipe manufacturer for the handling, storing, protection and installation of pipe and fittings.
- B. Watermain pipe, fittings, specials and accessories shall be installed in conformance with AWWA Specification C600, latest revision, and the additional requirements specified under Section 02713 "INSTALLATION OF WATER PIPELINE SYSTEMS", as well as herein.
- C. Each pipe shall be laid true to line and grade and in such manner as to form a close concentric joint with the adjoining pipe and to prevent sudden offsets in the grade line. No spalls, shims or lumps shall be used to raise the pipe to grade. All pipe shall be maintained accurately to the required line and grade. Any pipe that has the grade or joint disturbed after laying shall be relaid.
- D. Trenches shall be kept free from water so as to prevent flotation of the pipes and pipelines shall be constructed "in the dry", unless otherwise directed by the Owner, and shall not be laid when the condition of the trench or the weather is unsuitable for such work. The maintaining of pipe trenches in a dry condition shall be as specified in Section 02401 "DEWATERING, CONTROL AND DIVERSION OF WATER", and no separate payment will be made, but the cost thereof shall be deemed to be included in the unit prices bid for other items. At times when work is not in progress, open ends of pipe and fittings shall be securely closed so that no trench water, earth or other substance will enter the pipe or fittings.
- E. All fittings shall be anchored to prevent any movement of the fittings or the adjacent pipe. In general this anchorage shall be provided by the installation of Class B Portland Cement concrete thrust blocks, and joint restraint systems, clamps, yokes and tie rods as specified and shown on the drawings, as directed by the Owner, or as otherwise

required to satisfactorily restrain all fittings and appurtenances. Hand excavation may be required to excavate for the concrete thrust blocks. The Owner may require concrete to be placed at points on the pipeline other than at fittings. All concrete used for thrust blocks shall be exposed for at least sixteen hours before being covered. Insofar as possible, thrust blocking shall be placed so that the pipe and fitting joints will be accessible for repair. Concrete for thrust blocks is specified under Section 03310 "MISCELLANEOUS CONCRETE WORK", and will be measured separately for payment under the Item "Class B Cement Concrete Complete In-Place", as listed in the Bid.

- F. Taps for water service corporation stops shall be made where shown on the Drawings or as directed by the Owner. The tapping machine shall be of approved design and in good operating condition. Only a clean, sharp drill-tap tool of the proper size and thread shall be used. The machine shall be firmly clamped to the pipe at an angle of about 90 degrees as indicated on the plans. Threads shall be clean and sharp and deep enough so that no more than three threads show when the stop is inserted and tightened with the operating nut on top. The stop shall be tightened only enough to make a watertight joint and not over tightened. Corporation Stops will be measured and paid for under Section 02650 "WATER SERVICE LINES".

- G. Jointing of mechanical joint fittings, specials and valves shall be provided in accordance with the printed recommendations of the pipe manufacturer, and as specified. The mechanical joint fittings, joint restraint systems, specials and valves shall be suitable for jointing with the pipe with which they are used, and the Contractor shall provide, at no additional expense to the Owner, all necessary adapters for the proper jointing of pipe, pipe fittings, specials, and valves. The last 8 inches of the outside of the spigot end of pipe and the inside of the bell of the mechanical joint shall be thoroughly cleaned to remove all oil, grit and other matter from the joint. When assembling joint, it is essential that the gland be brought into place and bolts tightened in a manner to insure the maintaining of the same space between the gland and the face of the flange at all points around the socket. The range of bolt torque in making the joints shall be as recommended by the manufacturer of the mechanical joints. Over stressing of bolts will not be permitted; if effective sealing is not obtained at the recommended maximum bolt torque, the joint shall be disassembled, thoroughly cleaned and reassembled.

3.04 METHOD OF MEASUREMENT

- A. Ductile iron pipe for water mains and hydrant branches will be measured for payment by the linear foot (L.F.) in-place, complete, tested and disinfected, as measured along the axis of the pipe from the face of the hub forming the beginning of the work to the hub or spigot constituting the end of the line, with no deductions made for the length of fittings and valves in the line.

- B. Ductile iron pipe fittings will be measured for payment by the unit "pound" (LB.). The number of pounds of fittings to be paid for shall be

the weight stated in AWWA C153, latest revision. The Contractor shall furnish a copy of the Manufacturer's catalog to the Owner at the start of the work, and all fitting weights shall comply with AWWA C153.

- C. Testing and disinfecting water lines will not be measured separately for payment, but no additional retention from progress payments due the Contractor shall be made as outlined below.
- D. Flexible couplings (4" through 24" nom. diameter) will be measured for payment as unit assemblies "Each" complete, in-place and accepted, as listed in the Bid.

3.05 BASIS OF PAYMENT

- A. The quantity of ductile iron pipe measured in place as provided above, will be paid for at the unit price bid for "FURNISH AND INSTALL DUCTILE IRON PIPE" of the sizes listed in the Bid, which shall constitute full compensation for completion of a pre-condition survey, furnishing and installing ductile iron pipe and furnishing and installing all materials including all excavation and backfilling, compaction testing of trench backfill, tyton gaskets, jointing accessories, and flexible couplings and reducer couplings, including labor, tools and equipment, and for performing all operations in connection with the following:
 - 1. Hydrostatic testing and disinfecting of water main.
 - 2. Installation of all hydrant laterals, hydrant valves and hydrants.
 - 3. Reconnection of all existing services from existing water main to new water main.
 - 4. All final connections of new water main to existing distribution system water main at the connection points as indicated on the plans.
 - 5. The complete abandonment of the existing water main to the limits as indicated on the plans including all capping of abandoned water main and removal of all abandoned valve road boxes.
 - 6. Placement of all temporary pavement within the Right-of-Way.
 - 7. All other costs incidental and necessary to complete the work as specified, as indicated on the plans and as directed by the Owner.
- B. The quantity of "DUCTILE IRON FITTINGS", measured as provided above, will be paid for at the unit price bid, as listed in the Bid, which shall constitute compensation for furnishing and installing all materials, jointing accessories, joint restraint systems, sleeves, gaskets, glands, nuts, bolts, and special apparatus, including labor tools and equipment, testing and disinfecting, handling hauling, furnishing services of manufacturers' representatives and for all other specials and incidental and necessary work to complete the item as specified, indicated or directed by the Owner. Glands, bolts and nuts shall not be included in weights.

- C. No separate payment will be made for the completion of the Pre-Condition Survey and the field density compaction testing of trench backfill, but the costs thereof shall be deemed to be included in the unit price paid for "FURNISH & INSTALL DUCTILE IRON PIPE"
- D. No separate payment will be made for testing and disinfecting water mains, but the costs thereof shall be deemed to be included in the prices bid for other items of work under this section. See section 02710 "TESTING AND DISINFECTING WATER MAINS".
- E. The quantity of "COUPLINGS", measured as provided above, will be paid for at the unit price bid, "Each" as listed in the Bid.

END OF SECTION

SECTION 02640 - GATE AND BUTTERFLY VALVES, TAPPING SLEEVE AND VALVES, INSERTION VALVES, LINESTOPS, VALVE BOXES AND APPURTENANCES

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of the Work:

The work covered under this section of the Specifications consists of furnishing all labor, materials, equipment and appurtenances, and performing all operations in connection with providing gate valves, butterfly valves, tapping sleeve and valves, insertion valves, linestops, valve boxes and accessories, and all miscellaneous and appurtenant work, in accordance with the Specifications and Drawings, and as directed by the Owner.

B. Related Work Described Elsewhere:

1. Ductile Iron Water Mains and Appurtenances Section 02615
2. Fire Hydrants Section 02644
3. Installation of Water Pipelines Section 02713

C. References:

All valves, fittings, and appurtenances specified herein shall conform in all respects to AWWA Standard Specifications, latest revision, and to the additional requirements specified herein.

1.02 QUALITY ASSURANCE

A. Conformance Certificates:

1. The Contractor shall furnish to the Owner manufacturer's notarized certificates of conformance stating that all materials to be furnished under this section of the specifications conform with all specification requirements, and each shipment of gate valves, butterfly valves, tapping sleeves and valves, valve boxes and accessories meet all requirements of the specifications.

B. Submittals:

1. Shop Drawings shall be submitted for approval in accordance with Section 01340. They shall conform to the requirements of the AWWA Standard Specifications, latest revision, and shall include complete dimensional fabrication and erection details, net weights, material lists, maintenance data and all other additional information required by the Owner. Materials shall not be manufactured prior to shop drawing approval.

1.03 PRODUCT INSPECTION, RECEIVING, HANDLING AND STORAGE

- A. The inspection, receiving, handling, and storage of all materials shall conform in all respects to the requirements of AWWA Specification C 600, latest revision, Section 2.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Gate Valves:

1. Gate Valves shall conform to AWWA Standard C 509 or C 515, as manufactured by Mueller Model A-2360-20 or approved equal or A-2361-20 or approved equal; and shall incorporate the following features:
 - a. Type of Valve Ends: Mechanical Joint
 - b. Type of Gate: Resilient Seat
 - c. Type of Stem seal: O-Ring
 - d. Type of Mounting: Iron body with Symmetrical Wedge Disc - (Rubber Encapsulated)
 - e. Type of Stem: Non-rising
 - f. Type of Gaskets: Full Cut Rubber Impregnated Duck Material
 - g. Direction of Operating Nut Rotation: **Open Right**
 - h. Working pressure: 250 psi
2. Wrench Nuts shall be 2-inch, and shall conform to section 19 of AWWA Specification C 500, latest revision.

B. Butterfly Valves:

1. Butterfly valves shall conform to AWWA Standard C 504 for Class 150B service, Clow Style 4500 as manufactured by Clow Valve Co. or approved equal. The valve shall be suitable for buried service and shall incorporate the following features:
 - a. Type of Valve Ends: Mechanical Joint
 - b. Body: Cast iron, ASTM A 126 Class B.
 - c. Disc: Ductile iron, ASTM A 536 Grade 70-50-05 with ASTM A 276 Type 304 stainless steel body seat
 - d. Shafts: Stainless steel, ASTM A276, Type 304
 - e. Seat: EPDM full circle not penetrated by the valve shaft

- f. End Cover: Cast iron, ASTM A 126 Class B
 - g. Direction of Operating Nut Rotation: **Open Right**
 - h. Working pressure: 150 psi
 - i. Interior and exterior surfaces shall be shop-coated with an epoxy coating conforming to the requirements of ANSI/AWWA C550 to a minimum dry film thickness of 8 mil. The coating shall be NSF/ANSI approved.
- 2. Wrench nut shall be 2-inch and shall conform to Section 19 of AWWA Specification C500, latest revision.
 - 3. The valve discs shall be of streamlined shape to substantially reduce turbulence and insure low head loss across the valve.
 - 4. Field touch up of interior wetted surfaces is allowable.

C. Tapping Sleeve and Valves:

- 1. All tapping sleeves shall comply with AWWA Standard C 223 and shall be model 664 with or without MJ outlet option as manufactured by Smith-Blair, Inc. The sleeve shall be stainless steel and come complete with 304 stainless steel nuts and bolts. Test Plug shall be 3/4" NPT. Gasket shall be grade 60 Concave Wedge Gasket. With MJ option, a standard MJ gate valve can be used in place of tapping valve.
- 2. Tapping valves shall comply with AWWA Standard C-500 latest revision, iron body, bronze mounted, resilient disc, non-rising stem, parallel seat type. They shall have a maximum working pressure of 200 psi and be tested at 400 psi. Valves shall be furnished with "O" ring packing consisting of two "O" rings, and shall open to the right. The inlet flange shall be A.S.A. Class 125 flange and have raised portion to fit outlet flange of the Tapping Sleeve. The outlet side of tapping valve shall be A.W.W.A. Standard mechanical joint. Tapping valves shall be Mueller T-2360-16 (2"-12") and Mueller T-2361-16 (16"-24"), or approved equal.

D. Insertion Valves:

- 1. Insertion Valves shall conform to AWWA Standard C 509 for material specifications, EZ Valve 4"-16" as manufactured by Advanced Valve Technologies of Blue Island Illinois or approved equal; and shall incorporate the following features:
 - a. Type of Valve Ends: Split Mechanical Joint
 - b. Type of Gate: Resilient Seat, split bolted body, epoxy coated ductile iron
 - c. Type of Stem seal: O-Ring

- d. Type of Mounting: Rotating body with Symmetrical Wedge Disc - (Rubber Encapsulated) cut with the End Mill process.
 - e. Type of Stem: Non-rising stainless steel
 - f. Type of Gaskets: Full Cut Rubber Impregnated Duck Material
 - g. Direction of Operating Nut Rotation: **Open Right**
 - h. Working pressure: 250 psi
- 2. Wrench Nuts shall be 2-inch and shall conform to section 19 of AWWA Specification C 500, latest revision.
 - 3. The End Mill process shall constitute a rotary End Mill, that through the rotation of the Valve casting, cuts a slot 120 degrees across the top of the pipe only. This allows for the insertion of the gate mechanism.

E. Linestops:

- 1. Linestops shall be as manufactured by Hydra-Stop of Alsip Illinois. Fittings shall be the Hydra-Stop Premier type with 18-8 type 304 stainless steel construction and shall incorporate the following features:
 - a. 150 psi working pressure.
 - b. 360 degree coverage with SBR or Buna-N compounded throat gasket.
 - c. 18-8 stainless steel UNC threaded nuts and bolts
 - d. Extruded outlet and nozzle for superior strength
- 2. Test port shall be used to assure positive seal before stopping.
- 3. The actual HydraStop installation and removal shall only be performed by an experienced subcontractor approved by the Engineer.

F. Valve Boxes:

- 1. Valve boxes shall be compatible with the valves and shall be of tough even-grained cast iron and of the adjustable, slip, heavy pattern type. The upper section of the box shall be provided with a flange having sufficient bearing area to prevent undue settlement. The length of the top section shall be at least 26-inch and the length of the bottom section shall be at least 36-inch for a 5-foot box. The inside diameter of the box shall be at least 5-1/4 inches. The lower section of the box shall be designed with a bell to enclose the operating nut and stuffing box of the valve. Covers shall be tight fitting and essentially dirt-tight, shall be flush with the top of the box, and shall be marked "WATER". Valve boxes shall be thoroughly coated with two coats of asphalt varnish. Valve boxes shall be

suitable for the size valve on which they are used and shall be as manufactured by Quality Water Products, South Barre, MA 01074.

PART 3 - EXECUTION

3.01 INSPECTION

- A. All valves, valve boxes, and accessories shall be carefully inspected by the Contractor for defects before installation and all defective, unsound or damaged materials shall be rejected. The Owner will make such additional inspection he deems necessary and the Contractor shall furnish all necessary assistance for such inspection.
- B. Operation parts shall be operated several times to demonstrate proper operation and adjustment.

3.02 PREPARATION

- A. Proper implements, tools and facilities, satisfactory to the Owner shall be provided by the Contractor for the proper and satisfactory execution of the work.
- B. The interior of gate valves, tapping sleeve and valves, insertion valves, linestop fittings, valve boxes, and accessories shall be thoroughly cleaned of foreign matter before being lowered into the trench and shall be kept clean during laying operations.
- C. Gate valves, tapping sleeve and valves, insertion valves, linestop fittings, valve boxes and accessories shall be handled, stored, installed, jointed and protected by the Contractor in strict accordance with the printed recommendations of the manufacturer of the piping materials.

3.03 INSTALLATION

- A. The Contractor shall furnish to the Owner for his use, copies of the printed recommendations of the respective valve manufacturer(s) for the handling, storing, protection and installation of valves and accessories.
- B. Gate valves, tapping sleeve and valves, insertion valves, linestop fittings, valve boxes and accessories shall be installed in conformance with AWWA Specification C 600, latest revision, and as specified herein, and with the additional requirements contained in Section 02713 "Installation of Water Pipeline Systems".
- C. Installation of valves and valve boxes shall not be made when trench or weather conditions are unsuitable for the work. All excavations and valve structures shall be kept free of water during installation of the valves and jointing operations and for such additional lengths of time as may be required to insure the satisfactory installation of the valve assemblies and appurtenant work.

- D. Valve Boxes shall be provided for all valves and they shall be set plumb. Valve boxes shall be centered on the valve operating nut. Care shall be taken that no part of the riser section and its pad shall bear on any part of the valve. Provision shall be made to keep any stones, mud or debris from entering the riser section during and after backfilling. any blockage of the box shall be remedied by the Contractor at his own expense. Valves and riser section shall be centered on valves and the cover shall be set flush with the finished surface. The bottom of the cover shall have a minimum clearance of three (3) inches from the top of the riser pipe.
- E. Gravel bedding shall be carefully tamped under and around the valve box riser section and pad, and compaction will extend to a distance of at least four feet in locations of continuous trenching, elsewhere to the undisturbed trench face in each direction.
- F. Jointing of mechanical joint valves and accessories shall be provided in accordance with the printed recommendations of the manufacturer as specified. The mechanical joint valves shall be suitable for jointing with the pipe with which they are used and the contractor shall provide, at no additional expense to the owner, all necessary adapters for the proper jointing of the pipe, pipe fittings, specials and valves. The last eight inches of the outside of the spigot end of the pipe and the inside of the bell of the mechanical joint shall be cleaned to remove all oil, grit and other foreign matter from the joint. When assembling joint, it is essential that the gland be brought into place and bolts tightened in a manner to insure the maintaining of the same space between the gland and the face of the flange at all points around the socket. The range of bolt torque in making up joints shall be as recommended by the manufacturer of the mechanical joints. Overstressing of bolts will not be permitted; if effective sealing is not obtained at the recommended maximum bolt torque, the joint shall be disassembled, thoroughly cleaned and assembled.
- G. All materials found to be defective during the process of the work will be rejected by the Owner and the Contractor shall promptly remove such defective material from the site. All defective material shall be replaced by the contractor with new sound material at no additional expense to the Owner. The contractor shall be responsible for the safe storage of all material.
- H. Cut in valves, insertion valves, linestop fittings shall be installed according to the details provided in the Drawings and where designated by the Engineer. Sufficient crushed stone will be provided for bearing under the new valve or fitting. Insertion valves and linestops are provisional and shall be used only when needed as determined by the Engineer for the purpose of dewatering the existing water main to facilitate the work.

3.04 REMOVAL AND DISPOSAL OF VALVE ROAD BOXES

- A. All existing valve road boxes on abandoned water main as designated by the Engineer shall be removed entirely and disposed of by the Contractor. All removed materials become the property of the Contractor. The excavation shall be properly backfilled with suitable material and compacted as specified in section 02211 - Earth Trench Excavation and Backfill. Pavement restoration shall be in accordance with section 02513 - Pavement Restoration.

3.05 SERVICES OF MANUFACTURERS' REPRESENTATIVES

- A. The Contractor shall furnish, at no additional expense to the Owner, the services of manufacturers' representatives for such lengths of time as may be necessary to properly instruct the Contractor's personnel in the proper handling installation and jointing of the valves and accessories in accordance with the printed recommendations of the manufacturer.

3.06 METHOD OF MEASUREMENT

- A. Gate valves and Butterfly valves with Valve boxes will be measured for payment as unit assemblies "Each" complete, in-place and accepted, as listed in the Bid.
- B. Tapping sleeves and valves with valve boxes will be measured for payment as unit assemblies "Each" complete, in-place and accepted, as listed in the Bid.
- C. Cut in valves with valve boxes will be measured for payment as unit assemblies "Each" complete, in-place and accepted, as listed in the Bid. Couplings and ductile iron pipe nipples will be measured separately under the appropriate pay items.
- D. Insertion valves with valve boxes will be measured for payment as unit assemblies "Each" complete, in-place and accepted, as listed in the Bid.
- E. Linestopping will be measured for payment as unit assemblies "Each" complete, in-place and accepted, as listed in the Bid.
- F. Valve road box removal and disposal on abandoned water mains will only be measured for payment, if the valve box to be removed is outside of the lines of the new water main trench patch. Valve box removal and disposal will be measured as "Each", complete, as listed in the Bid. Pavement items will be paid under the unit prices as listed in the Bid.

3.07 BASIS OF PAYMENT

- A. For furnishing and installing unit assemblies of gate valves and butterfly valves with cast-iron valve boxes, complete, in-place and accepted, the Contractor will receive the contract unit price bid "Each" for "FURNISH AND INSTALL VALVE AND VALVE BOX", of the sizes and type listed in the bid.
- B. For furnishing and installing unit assemblies of tapping sleeves and valves with cast-iron valve boxes, complete, in-place and accepted, the

Contractor will receive the contract unit price bid "Each" for "FURNISH AND INSTALL TAPPING SLEEVE AND VALVE AND VALVE BOX", of the size listed in the Bid.

- C. For furnishing and installing unit assemblies of cut in valves with cast iron valve boxes, complete, in-place and accepted, the Contractor will receive the contract unit price bid "Each" for "FURNISH AND INSTALL CUT IN VALVE AND VALVE BOX", of the size and type listed in the Bid. Couplings and ductile iron pipe nipples will be measured separately for payment under the appropriate pay items.
- D. For furnishing and installing unit assemblies of insertion valves with cast iron valve boxes, complete, in-place and accepted, the Contractor will receive the contract unit price bid "Each" for "FURNISH AND INSTALL INSERTION VALVE AND VALVE BOX", of the size and type listed in the Bid. Patching will be measured separately for payment under the appropriate pay items.
- E. For furnishing, installing and removing unit assemblies of linestopping system (6" thru 12" sizes) by Hydra-Stop, Inc. of Blue Island, Illinois or equal, complete, in-place and accepted, the Contractor will receive the contract unit price bid "Each" for "FURNISH, INSTALL AND REMOVE 6" to 12" LINESSTOP", of the size listed in the Bid. Patching will be measured separately for payment under the appropriate pay items.
- F. For removing and disposing abandoned water valve road boxes on abandoned water mains, the Contractor will receive the contract unit price bid "Each" for "REMOVE AND DISPOSE ABANDONED ROAD BOX", as listed in the Bid.

END OF SECTION

SECTION 02644 - FIRE HYDRANTS

PART 1 - GENERAL

1.01 DESCRIPTION

A.Scope of Work:

The work covered under this section of the Specifications consists of the furnishing of all labor, equipment, materials, appurtenances, and performing all operations in connection with the installation of Fire Hydrants, at the locations and to the details indicated, and/or as directed by the Owner including removal of designated existing fire hydrants and delivery of same to the Pawtucket Water Supply Board, and all other related appurtenant work, complete, in-place and accepted.

B.Related Work Described Elsewhere:

- | | |
|---|---------------|
| 1.Earth Trench Excav. & Backfill | Section 02211 |
| 2.Ductile Iron Water Mains and Appurtenances | Section 02615 |
| 3.Gate Valves, Tapping Sleeves and Valves, Valve Boxes, and Appurtenances | Section 02640 |
| 4.Test and Disinfect Water Mains | Section 02710 |
| 5.Install Water Pipeline Systems | Section 02713 |

C.References:

All fire hydrants shall conform to the requirements of AWWA Specification C502, latest revision and to the additional requirements specified herein. Manufacturer shall supply complete maintenance data drawings for approval, and certificates of compliance in accordance with Section 1 of AWWA Specifications.

PART 2 - PRODUCTS

2.01 MATERIALS

A. All hydrants shall be of the dry barrel, compression shut off type closing with the pressure, with National Standard Thread. For purposes of standardization, hydrants shall be the Super Centurion 250 Model No. A423, as manufactured by Mueller Company, Decatur, Illinois. The drain valve shall operate automatically when the hydrant is operated, to provide drainage of the barrel. Bronze to bronze seating shall be standard.

The valve drainway shall be all bronze. Pressure seals in the main valve area shall be o-rings. Hydrants shall conform to the additional requirements specified herein.

1. Hydrants shall be equipped with the following features:
 - a. Type of Hydrant: Traffic type with safety stem coupling and safety flange.
 - b. Bury Length: 5'-6" with extension sections available in 6-inch increments to 2'-0" (Exact bury is to be determined in the field by the Contractor).
 - c. Number of hose and pumper outlets:
 - Two - 2 1/2-inch Hose Outlets
 - One - 4 1/2-inch Pumper Outlet
 - d. Joint Type: Mechanical Joints.
 - e. Type of Outlet Nozzle Threads:
 - 2 1/2-inch Hose Outlets to have National Standard Thread (Field Replaceable)
 - 4 1/2-inch Pumper Outlets to have National Standard Thread (Field Replaceable).
 - f. Type Construction:
 - Upper Valve Plate - Bronze
 - Seat Ring - Bronze
 - Drain Ring - Bronze
 - Operating Nut - Bronze
 - Nozzles - Bronze
 - g. Size of Hydrant (Nominal Diameter of Main Valve Opening): 5 1/4-inches
 - h. Direction of Operating Nut Opening Rotation: **Left**
 - i. Stem type: Dual O-Ring
2. The foot piece, or elbow design, shall have smooth transitional contours for maximum flow, and shall be coated with approved epoxy. It shall have blocking pads for easier setting, and two (2) lugs for strapping. Inlet connection shall be standard 6-inch mechanical joint.

3. Hydrants shall conform to the Torque requirements specified in AWWA Specification C502, latest revision, regardless of bury length.
 4. The opening between the wrench nut and top of the hydrant bonnet shall be protected from rain and dirt by an acceptable weather cap. Open left with arrow shall be on weather cap.
 5. All nozzles shall be provided with heavy cast iron caps, screwed on and attached to the upper barrel by non-kinking chains with connector ring. Chain loop shall permit free turning of the cap. All nozzles shall be fitted with gaskets. The operating nuts on nozzle caps shall be exactly the same size as that on top of the main stem. The operating nuts on nozzle caps and on top of the main stem shall be 1 1/2 inch pentagonal nuts. Hose and steamer nozzles shall be secured to the upper barrel by threads or quarter turn lock-type nozzles and locked into place for easy field replacement.
 6. Hydrant top section shall receive two shop coats of primer. Finish coat to be two field coats of exterior alkyd gloss enamel recommended for metal services. COLOR: **Chrome Yellow (Caution Yellow)**.
- B. Gate Valves and Valve Boxes for Fire Hydrants are specified under section 02640 "GATE VALVES, VALVE BOXES, AND APPURTENANCES" of the Specifications, and separate payment will be made under that Item as listed in the Bid.
- C. Ductile iron pipe for Fire Hydrants is specified under Section 02615 "DUCTILE IRON WATER MAINS AND APPURTENANCES" of the Specifications, and separate payment will be made under that Item as listed in the Bid.
- D. Crushed processed gravel fill around Hydrants is specified in Section 02211 "EARTH TRENCH EXCAVATION AND BACKFILL" of the Specifications. One and one-half inch stone bedding for hydrant drainage shall be provided from off-site sources in the quantities required for completion of the work, shall be as approved by the Owner and shall be paid for under the Item for "Crushed Processed Gravel". Stone bedding shall consist of clean, sound, tough, durable rock free from loam, clay, organic matter, and shall not contain more than 1 per cent crusher dust by weight. It shall, in general, be as specified by the "Standard Specifications for Road and Bridge Construction" of the State of Rhode Island, Article M.01.09, Crushed Stone. Crushed Stone shall conform to the following limits:

| <u>U.S. Standard Sieve Size</u> | <u>Percentage Passing By Weight</u> |
|-------------------------------------|---|
| 2 1/4 inch | 100 |
| 2 inch | 90-100 |
| 1 1/2 inch | 30-55 |
| 1 1/4 inch | 0-25 |
| 1 inch | 0-5 |

- E. Class B Cement Concrete for thrust blocks and restraints as shown on the Drawings shall be as specified in Section 03310 MISCELLANEOUS CONCRETE WORK", and separate payment will be made under that Item as listed in the Bid.

PART 3 - EXECUTION

3.01 INSPECTION

- A. All hydrants shall be carefully inspected by the Contractor for defects before installation and all defective, unsound or damaged materials shall be rejected.

3.02 PREPARATION

- A. Proper implements, tools, and facilities, satisfactory to the Owner, shall be provided by the Contractor for the proper and satisfactory execution of the work.
- B. The interior of new hydrants shall be thoroughly cleaned of foreign matter before being lowered into the trench and shall be kept clean during laying operations.
- C. The trench bottom and bedding shall be shaped and compacted and a flat rock or block shall be placed beneath the hydrant to give substantially uniform unyielding support to the hydrant.
- D. Hydrants and accessories shall be handled, stored, installed, jointed and protected by the Contractor in strict accordance with the printed recommendations of the manufacturer.

3.03 INSTALLATION

- A. Installation of Fire Hydrants shall be in conformance with the requirements of AWWA Specification C600, latest revision, and as indicated by drawings and as directed by the Owner.
- B. Resetting of existing fire hydrants shall be accomplished by the removal of the existing hydrant, hydrant service pipe and gate valve, and reinstallation of the existing hydrant, a new swivel hydrant tee, a new 6-inch ductile iron hydrant service pipe, a new 6-inch gate valve and a new valve box. The new hydrant service pipe shall be of one piece, if possible, between the hydrant and the gate valve and be restrained with Mega-Lug joint restraints. The existing hydrant shall be reconnected to the new hydrant service pipe according to details provided on the Drawings and as directed by the Owner. If in the event that the reset hydrant is in need of an extension (flange nuts below grade), the proper barrel extension will be provided by the PWSB and is to be properly installed by the Contractor at no additional cost to the Owner.

3.04 METHOD OF MEASUREMENT

- A. Fire Hydrants will be measured for payment as units "Each" complete, in-place, as specified, and as shown on the Drawings.
- B. Resetting of fire hydrants will be measured for payment as units "Each" complete, in-place, as specified, and as shown on the Drawings.

3.05 BASIS OF PAYMENT

- A. Fire Hydrants measured for payment as specified above, will be paid for at the unit price bid for "FURNISH AND INSTALL FIRE HYDRANT", as listed in the Bid, which shall constitute full compensation for furnishing and installing all hydrants, tie rods, jointing materials, and accessories, and all incidentals necessary to complete the work as specified, indicated on the Drawings, or as directed by the Owner. Payment for pipe, fittings and valves shall be made under the appropriate pay items.
- B. Resetting of fire hydrants measured for payment as specified above, will be paid for at the unit price bid for "RESET EXISTING FIRE HYDRANT", as listed in the Bid, which shall constitute full compensation for furnishing and installing all hydrants, tie rods, jointing materials, and accessories, and all incidentals necessary to complete the work as specified, indicated on the Drawings, or as directed by the Owner, including installation of PWSB supplied barrel extensions. Payment for pipe , fittings, valves, and valve boxes shall be made under the appropriate pay items.

END OF SECTION.

SECTION 02650 - WATER SERVICE LINES

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work Included:

This section covers the furnishing of all labor, equipment, and appurtenances, and performing all operations in connection with the installation of new water service connections, the replacement of old water services, and the installation of new air release valves, consisting of piping, goosenecks, fittings and adapters, corporation stops, hydrant stops, curb stops, curb and valve boxes and all appurtenant items, complete, in-place, as shown on the Drawings, as specified herein or as otherwise directed by the Owner. The work shall also include removing existing curb stops and curb boxes.

B. Related Work Specified Elsewhere:

- | | |
|---|---------------|
| 1. Earth Trench Excavation and Backfill | Section 02211 |
| 2. Ductile Iron Water Mains and Appurtenances | Section 02615 |
| 3. Installation of Water Pipeline Systems | Section 02713 |

1.02 QUALITY ASSURANCE

A. Reference Standards:

1. AWWA C800: Standard for Underground Service Line Valves and Fittings.
2. ASTM B88: Seamless Copper Water Tube.

B. Submittals:

1. Shop Drawings:

Shop drawings showing type of material and construction details for pipe, fittings, joints, corporation stops, hydrant stops, curb stops, curb boxes, valve boxes, and appurtenant items.

2. Conformance Certificates:

Each shipment of corporation stops, hydrant stops, curb stops, curb boxes, and valve boxes shall be accompanied with the manufacturer's notarized certification that materials meet specification requirements.

1.03 PRODUCT, DELIVER, STORAGE AND HANDLING

- A. Do not deliver water service materials to the job site until ready for installation. Water service materials shall be stored in a clean dust

free environment and shall be properly handled to prevent damage to materials and crimping of copper tubing.

PART 2 - PRODUCTS

2.01 CORPORATION STOPS

- A. Corporation stops for water service lines shall be bronze composition containing not less than 85 percent copper. All components of the corporation stop except for certain parts of the outlet connection, shall be manufactured in accordance with AWWA Standard C-800 latest revision.
- B. All corporation stops for 1-inch copper water service lines shall be Mueller B-25008 (ball valve compression connection type, CC/AWWA thread) or approved equal.
- C. All corporation stops for 2-inch copper water service lines shall be Mueller B-25008 (ball valve compression connection type, CC/AWWA thread) or approved equal. All service saddles shall be Smith-Blair model 617 with stainless steel hardware (CC/AWWA thread) or approved equal.

2.02 CURB STOPS

- A. Curb stops shall be manufactured of brass, cast in conformance with A.W.W.A. standard C-800. All curb stops for copper water service lines shall be Mueller B-25209 (ball valve compression connection type) or approved equal.

2.03 CURB BOXES

- A. Curb boxes for curb stops shall be a rod type service box with a plug cover, 30-inch rod, and adjustable from 54" to 66", as manufactured by Mueller Model H-10334 (1"), Bibby Ste-Croix Model V313 or approved equal (2"). The covers for curb boxes shall be screwed to the top section and shall have a brass plug, and shall have the word "WATER" cast in them. Curb stops shall be placed on a bedding of 1-inch crushed stone or gravel to provide adequate drainage.

2.04 FITTINGS

- A. All necessary fittings and adapters shall provide for the complete and proper fitting and installation of all water service lines. Fittings and adapters for flared pipe ends, shall be I.P. threaded brass fittings, bearing the trademark of maker, and shall be tested for casting defects. Fittings and adapters shall be as manufactured by Mueller Co., or approved equal. Conductive compression fittings will be permitted. Where the type of fittings or adapters is not indicated they shall conform to the standards of the Pawtucket Water Supply Board, and they shall be of approved types.

2.05 WATER SERVICE PIPE

- A. All water service piping and goosenecks shall be 1-inch diameter ASTM B88, Type K, soft temper copper water tubing. Copper tubing shall be as manufactured by Halstead Metal Products, a Division of Halstead Industries, Inc.
- B. A new water service corporation shall be installed for each existing house service, as shown on the drawings, or as otherwise directed by the Owner. Any non-copper water service line shall be replaced. The new water service line shall extend from the new ductile iron water main to the property line including the curb stop and box, as shown on the Drawings. Connection of new service pipe to existing service pipe shall be made with an approved coupling. Service pipe shall be laid to the depth and configuration shown on the Drawings. After the new main has been placed in operation, service to the homes shall be transferred by connecting the new service to the existing service at the property line.

2.06 AIR RELEASE VALVES

- A. Corporation and Curb stops for air release valves shall be 1-inch and shall be Mueller H-10045 corporation stop and Mueller H-10284 curb stop and drain, or approved equal, installed with all nipples and fittings as shown on the Contract Drawings.
- B. Air release valves will be furnished with 1-inch brass pipe riser tubes to the lengths required, and 1-inch brass caps, corporation stops and close nipples, as shown on the Contract Drawings. Ductile iron pipe will be drilled and tapped to accept the approved 1-inch corporation stop.
- C. Valve boxes for air release valves shall be of tough even-grained cast iron and of the adjustable, slip, heavy pattern type. The upper section of the box shall be provided with a flange having sufficient bearing area to prevent under settlement. The length of the top section shall be at least 26-inch and the length of the top section shall be at least 36-inch for a 5-foot box. The inside diameter of the box shall be at least 5-1/4-inches. The lower section of the box shall be designed with a bell to enclose the nut and the air release valve assemblies as shown on the Contract Drawings. Covers shall be tight-fitting and essentially dirt-tight, shall be flush with top of the box, and shall be marked as noted on the Contract Drawings "WATER". Valve boxes shall be suitable for the size valve on which they are used and shall be as manufactured by Mueller Model H-10334, or approved equal.

2.07 BLOW-OFF VALVES

- A. Blow-Off valve assemblies shall be 2" Gil Industries Aquarius Blow-Off System with a 2" stop & drain valve, 2" copper riser pipe to the length required, as manufactured by Gil Industries Inc. of Pensacola Florida, or approved equal, installed as shown on the Contract Drawings.
- B. Valve boxes for blow-off assemblies shall be of tough even-grained cast iron and of the adjustable, two piece slip type, heavy pattern valve box.

The upper section of the box shall be provided with a flange having sufficient bearing area to prevent under settlement. Valve boxes shall be thoroughly coated with two coats of asphalt varnish. The inside diameter of the box shall be at least 5-1/4-inches. Covers shall be tight-fitting and essentially dirt-tight, shall be flush with top of the box, and shall be marked as noted on the Contract Drawings "WATER". Valve boxes shall be suitable for the size blow-off valve assembly on which they are used and shall be as manufactured by Quality Water Products, South Barre, Ma 01074, or approved equal.

PART 3 - EXECUTION

3.01 WATER SERVICE AND AIR RELEASE VALVE LOCATIONS

- A. Exact locations of corporation stops, service lines and curb stops and boxes will be as shown on the Drawings or designated in the field by the Engineer. Air release valves will be installed at high points along the limits of the water main installation, as shown on the Drawings or designated in the field by the Owner to permit the future release of air which may become entrapped in the water mains.

3.02 INSPECTION

- A. Examine the copper tubing and brass pipe, and fittings, corporation stops, hydrant stops, curb stops and boxes for cracks, flaws or other defects. Remove all defective materials from the job site.

3.03 INSTALLATION

A. Workmanship:

All copper service water pipe and brass pipe, and fittings, corporation stops, hydrants, curb stops, and curb and valve boxes shall be installed by skilled workmen in an approved manner, and shall conform to the requirements of the Pawtucket Water Supply Board. All services are to be installed perpendicular to the center line of street and as straight and bend free as possible.

B. Jointing:

Jointing of copper tubing, brass pipe and fittings, corporation stops, hydrant stops and curb stops shall be in strict accordance with the printed recommendations of the respective manufacturers and as approved.

C. Corporation Stops:

For the purpose of installing corporation stops, the pipeline shall be tapped in strict accordance with the pipe manufacturer's printed recommendations and as approved. Corporation stops shall be tightened with a torsion wrench to the torque specified by the manufacturer and to ensure a watertight connection. Taps for corporation stops shall be made adjacent to the existing service lines or as directed by the Owner. The tapping machine shall be of approved design and in good operating

condition. Only a clean, sharp drill-tap tool of the proper size and thread shall be used. The machine shall be firmly clamped to the pipe at an angle of about 90 degrees. The drill-tap tool shall not be forced through the pipe wall. Threads shall be clean and sharp and deep enough so that no more than three threads show when the stop is inserted and tightened with the operating nut on top. The stop shall be tightened only enough to make a watertight joint and not over tightened.

Corporation stops 3/4" and larger shall be reused where the water main is not being replaced and the corporation is undamaged. All corporations to be reused as such shall be redrilled to remove any accumulated material within them. The drilling tool shall be one consistent with the design of water main drilling tools such as the Mueller E-5.

D. Curbstops and boxes:

The new curb stops and curb boxes shall be installed on the end of the new service line and shall be tested for leakage and disinfected along with the new main and service pipe. The curb stop shall be firmly bedded in the bottom of the service pipe trench with the key in the vertical position. All curbstops, where possible, are to be installed 18 inches back from the face of curb or edge of pavement, in the sidewalk area.

Before backfilling, curb boxes shall be centered over the curb stop on a firm foundation and shall be placed perfectly plumb so that the operating wrench can be placed in position easily. Special care shall be taken by the Contractor that no earth, stones or other obstructions enter the curb boxes during backfilling and that the earth is firmly tamped around the box so that it will remain centered and in a vertical position. The top section of the box shall be adjusted so that the cover is flush with the sidewalk or ground surface.

E. Air Release or Blow-Off Valves:

For the purpose of installing corporation stops for air release or blow-off valves, the pipeline shall be tapped in strict accordance with the pipe manufacturer's printed recommendations and as specified above for corporation stops.

Hydrant or curb stops, and brass riser tubes and fittings for air release or blow-off valves will be installed as shown on the Contract Drawings and the complete assembly shall be tested for leakage and disinfected along with the new main. Before backfilling, air release or blow-off valve boxes shall be placed on a concrete foundation as shown on the Drawings, and arranged so that the tee handle can be opened and closed using a standard curb stop wrench. Special care shall be taken by the Contractor that no earth, stones, or other obstructions enter the air release or blow-off valve boxes during backfilling, and that the earth is firmly tamped around the box so that it will remain in the vertical, proper position. The top section of the box shall be adjusted so that the cover is flush with the pavement or ground surface.

F. Testing Disinfection:

Hydrostatic and leakage tests and disinfection shall be performed in accordance with Section 02710 "TESTING AND DISINFECTING OF WATER MAINS". No separate payment will be made for testing and disinfection, and the cost thereof shall be deemed to be included in the work required herein, but an additional retention from progress payments due the Contractor shall be made as outlined below.

G. Remove and Dispose Existing Water Service:

Existing unused water services or vacant lot services (VLS) shall be shut off at the corporation stop and the existing water service pipe cut free from the water main. The curb box shall be removed and disposed. Leaking corporation stops shall be tightened, capped, or replaced with plugs if necessary to stop the leakage.

H. Remove and Replace Existing Corporation Stop:

Existing corporation stops that are less than 3/4-inch in size or damaged and that are attached to water mains that will not be replaced shall be removed UNDER PRESSURE using an approved wet tapping machine and the appropriate extraction and insertion tools. Sizes and types of outlet threads on existing corporation stops shall be determined in the field by the Contractor. The existing under sized tap will then be redrilled and tapped for a 1-inch corporation stop to be installed as previously specified.

3.04 METHOD OF MEASUREMENT

A. Water Service Pipe:

Copper tubing for water services including gooseneck and fittings, will be measured for payment by the unit linear foot (L.F.), complete in place, and measured as the actual number of linear feet of service pipe installed as ordered by the Engineer from the corporation to the connection coupling union in a straight line, parallel with the roadway surface.

B. Corporation Stops:

Corporation stops will be measured for payment by the unit "Each".

C. Curb Stops and Curb Boxes:

Curb stops and curb boxes will be measured for payment by the unit "Each".

D. Air Release or Blow-Off Valves:

Air release or blow-off valves will be measured for payment by the unit "Each", which shall include hydrant/curb stop, corporation stop, brass

riser tube and fittings, and valve box per each air release or blow-off valve.

E. Remove and Dispose Existing Water Service:

Remove and Dispose existing water services will be measured for payment by the unit "Each", which shall include all caps, plugs, excavation and backfill, and all other related and incidental items. Removing and plugging existing corporation stops and taps shall be measured for payment separately by the unit each as specified below.

F. Remove and Replace Existing Corporation Stop:

Removal and replacement of existing corporation stops will be measured for payment by the unit "Each", which shall include all corporation stops, tools, equipment, plugs, and all other related incidental items per each removed and replaced corporation stop.

3.05 METHOD OF PAYMENT

A. Water Service Pipe:

Payment for water service pipe, as specified above, will be made at the unit price bid for "REMOVE AND REPLACE or FURNISH AND INSTALL (ONE INCH/TWO INCH) WATER SERVICE PIPE", as listed in the Bid which shall include full compensation for removing, if necessary, the old water service pipe, installing and connecting the water service pipe complete with gooseneck, fittings, adapters and couplings; and performing all incidental work necessary to complete the work in accordance with the Drawings and Specifications, and as directed by the Owner. An additional retention from progress payment due the Contractor shall be made for testing and disinfecting, as outlined below.

B. Corporation Stops:

Payment for corporation stops as specified above will be made at the unit price bid for "REMOVE AND REPLACE or FURNISH AND INSTALL (ONE INCH/TWO INCH) CORPORATION STOP", as listed in the Bid, which shall include full compensation for all materials, tools, equipment and work necessary and required to install new corporation stops.

C. Curb Stops and Curb Boxes:

Payment for curb stops and curb boxes as specified above will be made at the unit price bid for "REMOVE AND REPLACE or FURNISH AND INSTALL (ONE INCH/TWO INCH) CURB STOP AND CURB BOX", as listed in the Bid, which shall include full compensation for all materials, tools, equipment and work necessary and required to remove, if necessary the old curb stop and curb box, and to install new curb stops and curb boxes.

D. Air Release or Blow-Off Valves:

Payment for air release or blow-off valves as specified above, will be made at the unit price bid for "FURNISH AND INSTALL AIR RELEASE or BLOW-OFF VALVE AND VALVE BOX", as listed in the Bid, which shall include full compensation for all materials, tools, equipment and work necessary and required to install new hydrant stops, corporation stops, brass riser tubes and fittings, and valve boxes.

E. Remove and Dispose Existing Water Service:

Payment for removing and disposing existing water services as specified above will be made at the unit price bid for "REMOVE AND DISPOSE ABANDONED WATER SERVICE", as listed in the Bid, which shall include full compensation for all materials, tools, equipment and work necessary and required to remove and dispose existing water services.

F. Furnish and Install or Remove and Replace Existing Corporation Stop:

Payment for removing and replacing existing corporation stops as specified above will be made at the unit price bid for "REMOVE AND REPLACE EXISTING or FURNISH AND INSTALL (ONE INCH/TWO INCH) CORPORATION STOP", as listed in the Bid, which shall include full compensation for all materials, tools, equipment and work necessary and required to remove and replace existing corporation stops.

END OF SECTION

SECTION 02710 - TESTING AND DISINFECTING WATER MAINS

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of the Work: The work covered under this section of the Specifications includes furnishing all labor, equipment, appurtenances, and materials, and performing all operations in connection with testing and disinfecting all completed water pipelines, service connections and hydrant assemblies, and appurtenances, in accordance with this section of the Specifications and as directed by the Owner.

B. At no time is there to be a physical connection between the existing distribution system and the newly installed main, until final approval is given by the PWSB Laboratory. The complete Pressure Testing, Flushing, and Disinfecting Procedures must be completed before the final approval is given, and the Contractor is allowed to make any connections to the existing distribution system. The Contractor shall utilize a separate, temporary piping system, conforming to the requirements of Section 02750 "TEMPORARY BYPASS PIPING AND SERVICES", for flushing, filling, testing and chlorination of various sized water mains. The temporary piping system shall consist of corporation stops or valves on the supply line and the main to be filled. A reduced pressure zone device (relief valve between two check valves) shall be installed in the temporary piping system to ensure that no water is allowed to return to the supply line.

C. Fire hydrants may not be used for sampling points but may be utilized as a feed source if properly flushed and the above temporary piping system installed.

D. Main line valves SHALL NOT be utilized to fill, flush, test or chlorinate water mains unless authorized and supervised by the Water Supply Board Representative.

E. Related Work Described Elsewhere:

- | | |
|---|---------------|
| 1. Ductile Iron Water Mains and Appurtenances | Section 02615 |
| 2. Fire Hydrants | Section 02644 |
| 3. Water Service Lines | Section 02650 |
| 4. Cleaning and Lining Water Mains | Section 02700 |
| 5. Temporary Bypass Piping and Services | Section 02750 |

PART 2 - PRODUCTS

2.01 MATERIALS

A. Chlorine for disinfection shall be provided and used by the Contractor, and shall conform to AWWA Specification B300 and C651, latest revisions

and be NSF-60 approved for contact with drinking water. The Contractor shall furnish the Owner a certificate of compliance that the disinfectant specified above conforms to the AWWA standards. NSF-60 approval shall be affixed to the container of chlorine.

PART 3 - EXECUTION

3.01 HYDROSTATIC TESTING

- A. Tests for leakage shall be conducted on all portions of completed water pipelines and appurtenances, and all methods and procedures for performing the testing of water mains shall be subject to the approval of the Owner. Interiors of all pipe shall be cleaned of all dirt and foreign materials prior to testing.
- B. Testing of watermains shall conform to the requirements of Section 4 of the AWWA Specification C 600, latest revision, except as herein specified.
- C. After the pipe has been laid and the trench has been backfilled, and before the work is accepted, each section of pipe shall be flushed, tested and disinfected. Water for testing and disinfection will be furnished by the Owner at no expense to the Contractor. The Contractor shall do all work and shall furnish all means and apparatus necessary for admitting water to the mains for disinfection and testing, including pumps, calibrated gages and metering devices. In sections where there are high points in the line that cannot be otherwise vented (where permanent air release valves and boxes have not been provided), at dead ends and at valved branch connections to existing mains, the Contractor shall install temporary 1-inch corporation stops and temporary suitable blowoff pipes as required, so that air can be expelled. He shall also install any riser pipes required to discharge the water used for flushing and disinfecting the mains. After the tests are completed, plug all temporary taps and remove all temporary riser pipes and other apparatus.
- D. In general, testing shall be carried out with as few permanently made-up connections to the existing water system as possible; with as many joints as practical uncovered and exposed; and in an approved manner. Pressure testing shall consist of completely filling each section from valve to valve with water from the water distribution system and maintaining a hydrostatic test pressure of **150 psi**, measured at the highest point in the section, and shall be required to hold the pressure for **at least 2 hours**.
- E. Testing of watermains shall be performed by the Contractor at his expense and in the presence of the Water Supply Board Representative. The Water Supply Board Representative shall witness every test and rule on its acceptance. All samples will be taken by the Water Supply Board Representative.
- F. If the specified pressure cannot be held for the required time (see app. A - Pressure and Disinfection Procedure), the Contractor shall locate and repair the leaks and the pipelines shall be retested, repeatedly if

necessary, by the Contractor, until the pressure test requirements are met, at no additional expense to the Owner.

3.02 DISINFECTING WATERMAINS AND APPURTENANCES

- A. All portions of completed watermains and appurtenances are to be disinfected before acceptance for operation by the Owner. The entire Testing and Disinfection procedure requires that the Contractor work closely under the direction of the Water Supply Board Representative who will coordinate the entire procedure with the PWSB Laboratory and the Contractor.
- B. Watermains shall be disinfected by the Contractor in conformance with the PWSB Procedure for Disinfecting Water Mains (see Appendix A), and shall be witnessed and approved by the Water Supply Board Representative.
- C. To prevent possible back flow or siphonage of contaminants into the water distribution system which is in service, the Contractor shall be required to provide a reduced pressure zone device (relief valve between two check valves) installed from the distribution system to the water main being treated and to provide such other safety and control measures as directed by the Water Supply Board Representative.
- D. Before disinfection, water mains and services shall be thoroughly flushed. A turbidity reading of below five (5) shall be monitored by the Water Supply Board Representative before flushing is discontinued and chlorination may begin. Flushing shall be at a rate sufficient to create a water velocity of at least 3.0 feet per second through the pipe.
- E. A corporation stop(s) shall be provided at a location(s) for feeding of the liquid chlorine solution within five (5) feet of one end, and at locations designated by the Water Supply Board Representative for sampling points. All sampling points shall be within 10 feet of the end points of the new main to be tested and chlorinated, all as determined by the Water Supply Board Representative. Copper tubing shall be used for all chlorination and sampling pipe. Chlorine shall be continuously fed in a liquid solution, made from crystalline sodium hypochlorite. All samples shall be taken at the same sampling points (copper tubing) for the entire procedure and shall follow the same flow pattern throughout the testing procedure (point A to point B).
- F. The initial chlorine concentration in the pipe shall be at least 25 mg/L when tested by the Water Supply Board Representative. The treated water will remain in the water main for at least twenty-four (24) hours. After the twenty-four hour retention period the chlorine concentration in the pipe shall be no less than 10 mg/L when tested by the Water Supply Board Representative. If, after the applicable retention period, the chlorine concentration is at least 10 mg/L the heavily chlorinated water shall be flushed from the main until the chlorine concentration in the water leaving the main when tested is no higher than 1 mg/L, and the turbidity is less than 1.0. If the chlorine concentration when tested is less than 10 mg/L, this procedure shall be repeated.

- G. Bacteriological testing shall be done by the Water Supply Board Representative a minimum of 16 hours after the final flushing and before the water main is put into service. A standard heterotrophic plate count (HPC) test may be required at the option of the owner. Once the main has been allowed to stand for a minimum of 16 hours, the first sample shall be immediately taken without flushing the main. While the sample tap is left running from the first sample, a second sample shall be taken a minimum of 15 minutes after the first sample was taken. Each sample usually requires a twenty-four (24) hour period to ensure that no coliform organisms exist. If the testing is positive, the procedure shall be repeated. No water main shall be put into service without the written permission of the Owner.
- H. Under certain conditions, an emergency type chlorination may be conducted with the written approval of the Chief Engineer.
- I. Chlorination of valves, fittings and short lengths of main (less than 50 ft) that will not be included in the normal chlorination procedure shall be thoroughly disinfected by contact swabbing and/or brushing with a high strength sodium or calcium hypochlorite solution in the concentration of 500 milligrams of available chlorine per liter of water.
- J. The Contractor shall be responsible for satisfactory disposal of all flushing water and chlorinated water at no additional expense to the Owner.
- K. The Contractor shall submit, to the Owner for prior approval, the type of chlorine to be used, the disinfection experience of the workers, and the procedures and equipment to be used by the Contractor.
- L. The Contractor is hereby warned that water main disinfection shall only be accomplished by specially trained personnel, and that the project's water mains are vital to the safety and well being of the municipality.
- M. The Contractor's workers who are responsible for the water main work should be aware of the potential health hazards with chlorine and should be trained to observe carefully the prescribed construction practices and disinfection procedures. The effectiveness of disinfection depends in large measure on maintaining clean pipes and avoiding major contamination during construction.
- N. The Contractor shall give thorough consideration to the impact of highly chlorinated water flushed to the receiving environment. If there is any question that damage may be caused by a chlorinated waste discharge (to fish life, plant life, physical installations, or other downstream water uses of any type), then an adequate amount of reducing agent should be applied by the Contractor to water being disposed of, in order to neutralize thoroughly the chlorine residual remaining in the water.
- O. A Pawtucket Water Supply Board Pressure and Disinfection Procedure and a short Summary is included in these Specifications as Appendix "A".

3.03 METHOD OF MEASUREMENT

- A. The work and materials required by this section of the Specifications including the temporary corporation stops and temporary piping systems, will not be measured separately for payment.

3.04 BASIS OF PAYMENT

- A. No separate payment will be made under this section of the Specifications for testing and disinfection of water mains and related work. Compensation for such work as required, shall be considered to be included in the prices bid for other applicable items of work under this contract.

END OF SECTION

SECTION 02713 - INSTALLATION OF WATER PIPELINE SYSTEMS

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work Included:

This section covers the installation of water pipeline systems, complete, including pipe, fittings, valves, hydrants, blowoffs, water service lines, and all appurtenant items.

B. Related Work Specified Elsewhere:

- | | |
|---|---------------|
| 1. Earth Trench Excavation and Backfill | Section 02211 |
| 2. Ductile Iron Water Mains and Appurtenances | Section 02615 |
| 3. Fire Hydrants | Section 02644 |
| 4. Water Service Lines | Section 02650 |

1.02 QUALITY ASSURANCE

A. Conformance:

1. The Contractor shall furnish to the Owner manufacturer's notarize test reports and method of test to show compliance with all specification requirements; and notarized certificates of conformance stating that all pipe, valves, hydrants, corporation stops, curb stops, and appurtenant materials to be shipped and installed conform with all specification requirements.

2. Installation of pipe, valves, hydrants, corporation stops, curb stops and appurtenant materials shall be performed in conformance with AWWA Specification C600, latest revision, for the various materials listed, and to the requirements of the Pawtucket Water Supply Board.

1.03 JOB CONDITIONS

A. Protection:

1. Prevent foreign material from entering the pipe, fittings, valves and hydrants during installation. Whenever pipe installation is stopped, seal the open end of the pipe with a watertight plug to prevent trench water, debris or other material from entering the pipe. Take adequate measures to prevent flotation.

2. Pipe delivery shall be closely coordinated with installation. No debris, tools, clothing or other materials shall be placed in the pipe.

3. Pipe shall be installed in dry excavations. If water is present in the trench after installation, then the seal shall be left in place until the trench has been pumped dry.

B. Unsuitable Conditions:

No pipe shall be installed when, in the opinion of the Engineer, trench or weather conditions are unsuitable.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

A. All pipe, fittings, valves, hydrants and appurtenances shall be carefully handled, stored and protected in such a manner as to prevent damage to materials and protective coatings and linings. Under no circumstances shall such materials be dropped or dumped into the trench. Remove any broken or damaged materials from the construction site and do not use in any portion of the construction. Any broken, damaged, or otherwise defective materials which are included in the construction shall be removed and replaced at no additional expense to the Owner.

PART 2 - PRODUCTS

2.01 DUCTILE IRON WATER MAINS AND APPURTENANCES

A. As shown on the Drawings. Refer to Section 02615 for Specifications.

2.02 GATE VALVES, TAPPING SLEEVES AND VALVES, VALVE BOXES AND APPURTENANCES

A. As shown on the Drawings. Refer to Section 02640 for Specifications.

2.03 FIRE HYDRANTS

A. As shown on the Drawings. Refer to Section 02644 for Specifications.

2.04 WATER SERVICE LINES

A. As shown on the Drawings. Refer to Section 02650 for Specifications.

2.05 CORPORATION STOPS, CURB STOPS AND CURB BOXES

A. As shown on the Drawings. Refer to Section 02650 for Specifications.

2.06 CONCRETE FOR THRUST BLOCKS AND ENCASEMENTS

A. Cement concrete for thrust blocks and encasements shall be Class B cement concrete and shall have a minimum compressive strength of 3,000 psi after 28 days. Refer to Section 03310 for Specifications.

PART 3 - EXECUTION

3.01 PREPARATION

A. Excavation:

Perform excavation in accordance with the requirements of Section 02211 "EARTH TRENCH EXCAVATION AND BACKFILL".

B. Dewatering:

Perform dewatering as necessary to install pipelines in the dry, in accordance with the requirements of Section 02401 "DEWATERING, CONTROL AND DIVERSION OF WATER".

C. Cleaning and Inspection:

1. The interior of all pipe, fittings, valves and hydrants shall be thoroughly cleaned of all foreign material, and inspected for cracks, flaws or other defects before installation, and shall be kept clean until the work is accepted. All joint contact surfaces shall be kept clean until the joint is completed. Mark all defective, damaged or unsound materials with bright marking crayon or paint and remove from job site.
2. Before lowering into the trench and while suspended, each pipe and fitting shall be carefully examined for defects and no pipe or fitting shall be laid which is known to be defective. All pipe or fittings found to be defective before being laid shall be clearly marked and removed from the job, as stated above. If any pipe or fitting shall be found to be defective after being laid, it shall be removed and replaced with a sound pipe or fitting by the Contractor at his expense.

D. Excavation of Existing Facilities:

When connections are to be made to existing pipe or appurtenances, the actual elevation of which cannot be determined without excavation, the Contractor shall excavate for and expose the existing facility before laying any pipe or conduit. The Owner will inspect the existing facility and will make any necessary adjustments in the line or grade of the proposed pipe to accomplish the connection.

3.02 INSTALLATION OF PIPELINE

A. General

1. Install pipelines and other equipment appurtenant to the pipeline, at the locations indicated on the Drawings or as otherwise designated by the Owner to accommodate field conditions. At no time is there to be a physical connection between the existing distribution system and the newly installed main, until final approval is given by the PWSB

Laboratory. This involves the completion of the PWSB Pressure Testing, Flushing, and Disinfecting Procedures. The Contractor shall utilize a separate, temporary piping system for flushing, filling, testing and chlorination of various sized water mains (please see Section 02710 Testing and Disinfecting Water Mains). All pipelines shall be installed as specified herein and in accordance with additional requirements specified in Section 02615 "DUCTILE IRON WATER MAINS AND APPURTENANCES".

2. As each length of pipe is placed in the trench, the joint shall be completed in accordance with the applicable sections of the pipe material specifications, and the pipe shall be brought to the correct line and grade. Secure the pipe in place with the specified bedding material tamped under and around the pipe, except at the joints. Care shall be taken to prevent dirt and water from entering the joints. No pipe shall be laid in water. All rock, stones or other material likely to damage the pipe or protective coatings and linings shall be moved.
3. In addition to the requirements specified herein, the piping, fittings, valves, hydrants and water service lines shall be provided in accordance with the printed recommendations of the respective manufacturers and as approved.

B. Pipe Laying:

1. Pipe shall be laid true to line and grade and joined in such a manner that the offset of the inside of the pipe at any joint is held to a minimum. Deflections from a straight line or grade, as required by vertical curves, horizontal curves, or offsets, shall be made using fittings or specials, as indicated and/or as directed. Deflections shall not exceed those recommended for the type of pipe or joint used.
2. Unless specifically authorized otherwise by the Owner in writing, the pipeline shall be installed so that a positive or negative grade is maintained between high and low points to avoid air pockets. If permanent air release valves are not provided, record location of all high points so they may be readily located.
3. Install pipe with bell ends facing the direction of laying, unless directed otherwise by the Owner. Where pipe is laid on a grade of 10 percent or greater, the installation shall proceed uphill with the bell ends facing upgrade.
4. Cutting of pipe for inserting valves, fittings and closure pieces shall be done in a neat and careful manner without damage to the pipe. Cuts shall be made by approved methods to produce clean square cuts, and in accordance with the manufacturer's instructions. Pipe damaged by the Contractor by improper or careless methods of cutting, shall be replaced at his expense.

5. All open ends of the pipe shall be securely closed with a watertight plug at the end of each day's work and whenever work is not in progress, so as to prevent the entry of water, foreign material, or other substance.

C. Reaction Anchorage and Blocking - Pressure Flow Pipelines:

1. Provide thrust blocks, anchors, joint restraint systems, or other approved means for preventing pipe movement, at all push-on or mechanical joint plugs, caps, tees, and crosses; bends deflecting 11-1/4 degrees or more; and reducers and valves installed in piping subjected to internal hydrostatic pressure in excess of 13 psi.
2. Construct thrust blocks in accordance with details shown on the Drawings, sized to accommodate the specified test pressure of the pipeline. Thrust blocks shall extend from the fitting to solid undisturbed earth, and shall be constructed so the joints are accessible for repair. If adequate support against undisturbed earth cannot be obtained, provide joint restraint systems, as approved by the Owner. All hydrants, however, shall be restrained as shown on the Drawing.
3. Where bends turn down and the resulting thrust will be upward, provision to restrain the thrust shall be made with either lock type pipe and fittings, concrete anchors, joint restraint systems, or a combination thereof.
4. Provide joint restraint systems or other supports for fittings installed in fills or other unstable soil, above grade, or exposed within structures, as required by the Drawings, as specified in other sections of the Specifications, or as necessary to prevent movement.

D. Installation of Concrete for Thrust Blocks and Encasements:

1. Installation of concrete for thrust blocks and encasements shall be in accordance with Section 600 "Portland Cement Concrete" of the State of Rhode Island Standard Specifications for Road and Bridge Construction; and to the additional requirements specified in Section 03310 "MISCELLANEOUS CONCRETE WORK".
2. Insofar as possible, thrust blocking anchorages shall be so placed that the pipe and fitting joints will be accessible for repair.

E. Connections to Existing Pipelines:

1. Make connections between new work and existing piping using couplings and fittings suitable for the conditions encountered. Make each connection at a time and in a manner authorized by the Owner. At no time is there to be a physical connection between the existing distribution system and the newly installed main, until final approval is given by the PWSB Laboratory. The complete Pressure Testing, Flushing, and Disinfecting Procedures must be completed

before the final approval is given. Provide facilities for excavations without damage to adjacent property.

2. Take all precautions to prevent contamination when making connections to existing potable water lines. No trench water, mud or other contaminating substances shall be permitted to enter the pipeline.

F. Valve Operations:

The Owner will furnish personnel to operate all valves in the water system without cost to the Contractor. The Contractor shall notify the Owner at least 48 hours in advance of any desired valve operation. Under no circumstances shall the Contractor operate any valve controlling flow of water in the water system.

G. Concrete Encasement:

Install concrete encasement where indicated on the Drawings or where required by other sections of the specifications. Block all pipe in place to prevent flotation.

H. Protection of Metal Surfaces:

Protect all ferrous metal rods, clamps, bolts, and other accessories subject to submergence or contact with earth or fill material and not encased in concrete, with two coats of coal tar paint. Apply the first coat to clean, dry metal surfaces and allow to dry before applying the second coat.

3.03 INSTALLATION OF PIPELINE APPURTENANCES

- A. Install all valves, hydrants, air release valves, water service lines and other equipment appurtenant to the pipeline, at the locations indicated on the Drawings or as otherwise designated by the Owner to accommodate field conditions.

1. Installation of Valves: Install valves in the pipeline in the same manner specified for laying and jointing the pipe and in accordance with additional requirements specified in Section 02640 "GATE VALVES, BUTTERFLY VALVES, TAPPING SLEEVES AND VALVES, VALVE BOXES AND APPURTENANCES".
2. Valve Boxes: Except where specified otherwise, install valve boxes on all buried valves. Install boxes such that no stress is transmitted to the valve. Set boxes plumb and directly over the valve with the top of the box placed flush with the finished grade. Backfill and thoroughly compact around each box. Provide extended stems on valves where required such that the operating nut is not lower than 4 feet below finished grade.
3. Installation of Fire Hydrants: Install fire hydrants in the same manner specified for laying and jointing pipe and as detailed on the

Drawing, and to additional requirements specified in Section 02644 "FIRE HYDRANTS".

4. Installation of Air Release/Blowoff Valves: Air release/blowoff valves shall be provided as shown on the drawings or as directed by the Owner. Payment will be made at the unit price bid for "FURNISH AND INSTALL AIR RELEASE/BLOWOFF VALVE AND VALVE BOX", as listed in the Bid.
5. Installation of Water Service Lines: Install water service lines in the same manner specified for laying and jointing pipe and as detailed on the Drawing, and to additional requirements specified in Section 02650 "WATER SERVICE LINES".

3.04 FIELD QUALITY CONTROL

- A. Cooperation with Pawtucket Water Supply Board: Installation of water pipeline systems shall be done at the convenience and with the authorization of the Pawtucket Water Supply Board to enable the Board to meet such peak demands as are imposed upon the distribution system.

Before proceeding with the connection to the existing main, the Contractor shall have completed all necessary excavation, and have all necessary materials for connections ready, together with suitable equipment for cutting and removing the pipe, removing water from the trench and placing fittings and pipe. Where shutting down of a main is required for the making of a connection, the Contractor shall carry on his work continuously to completion, so that the water can be turned on as soon as possible.

- B. Notification of Customers: Before any mains are shutdown, the Contractor shall ascertain the customers to be affected by the shutdown, and shall notify each at least 24 hours in advance and again just prior to the shutdown. The Pawtucket Water Supply Board shall furnish the Contractor with a list of customers to be affected by a shutdown.
- C. Accuracy of Work: The Contractor shall be responsible for making careful measurements and for providing proper pipe lengths and fittings at the proper locations, so that the required connections will properly fit into the existing mains. All pipe will be cut in a manner acceptable to the Owner.
- D. Alignment Tests:
 1. Each section of pipe will be checked by the Owner in order to determine whether any displacement of the pipe has occurred. The Contractor shall provide suitable assistance to the Owner. The Contractor shall repair any poor alignment, displaced pipe, or other defects discovered, as directed by the Owner, at no additional expense.

E. Pipe Deflection Tests:

1. Whenever pipe is installed, each section shall be measured for vertical ring deflection after installation and final landfill. Maximum allowable ring deflection of the pipeline shall be as required in the pipe materials section of the specifications.
2. The Contractor shall provide all necessary equipment to conduct the tests.

3.05 PIPE PRESSURE AND LEAKAGE TESTS

- A. Each section of pipe shall be subjected to hydrostatic tests as specified in Part 3.02, Section 02710 "TESTING AND DISINFECTING WATER MAINS", of the Specifications. Pressure and leakage tests shall conform to the requirements of AWWA Specification C 600, latest revision.

3.06 DISINFECTION OF POTABLE WATERLINES

- A. Disinfection of water mains and appurtenances shall be performed in accordance with the procedure set forth in AWWA C 651-Disinfecting Water Mains, and to the additional requirements specified in Part 3.02, Section 02710 "TESTING AND DISINFECTING WATER MAINS", of the specifications.

3.07 METHOD OF MEASUREMENT

- A. The work required to install pipeline systems as described by this section of the Specifications will not be measured separately for payment. Payment will be made under the items for Furnish and Install as listed in the Bid.

3.08 BASIS OF PAYMENT

- A. No separate payment will be made under this section of the Specifications for installation of water pipeline systems, but the costs thereof shall be deemed to be included in the prices bid for the various items to be furnished and installed under this contract, as listed in the Bid.

END OF SECTION

SECTION 02750 - TEMPORARY BYPASS PIPING AND SERVICES

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. 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 systems 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 procedures approved in writing by the Owner. Any and all temporary materials and work required to provide for the interconnection and disconnection of the systems will not be considered temporary bypass piping, but shall be considered incidental to the work, and compensation for such work shall be considered to be included in the prices bid for the applicable items for work under this contract.

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 "TEMPORARY BYPASS PIPING AND SERVICES". Should it be determined at any time during the construction, that the proposed bypass 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 Engineer shall have the final approval on the layout and pipe sizes of the proposed bypass piping system.

B. 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 shall be limited as outlined above. Temporary bypass piping includes 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, for domestic and fire protection uses, complete, in strict accordance with the Specifications and Drawings, and as directed. Where fire hydrants are by-passed, a 4-inch bypass line shall be used and a 4-inch outlet complete with valve 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.

C. 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 Pawtucket Water Supply Board 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 and to maintain the public health.

1.02 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 - MATERIALS

2.01 PIPING, VALVES, HYDRANTS, AND HOSES

- A. 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. The pipe and other materials shall provide adequate watertightness and be constructed of a material acceptable to the Owner and proven to be approved for contact with drinking water by the NSF-61. Temporary hydrants shall meet the approval of the Pawtucket Water Supply Board and local Fire Department prior to installation. In general, any bypass piping including a temporary hydrant shall be 4-inch minimum.
- B. All hoses shall be 1-inch minimum diameter and shall be capable of withstanding at least 1-1/2 times the normal water working pressures and all other conditions of use. All hoses that are to supply potable water to buildings are to be NSF-61 approved for contact with drinking water.

PART 3 - EXECUTION

3.01 TEMPORARY BYPASS PIPING AND SERVICES

- A. The Contractor shall provide temporary valved bypass piping and services as required 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. 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 to the building being serviced. 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 the 4-inch temporary bypass pipe and services.

- B. In general, all temporary piping and services shall be provided in such a manner as to protect it from damage and to insure 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.
- C. The bypass pipes 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 and make all necessary connections required to supply the bypass pipes (including services) with water from hydrants or existing water mains. Procedures for connecting bypass pipes to existing water mains that are to remain in service are specified elsewhere in this Section.
- D. All temporary building service connections shall extend from the bypass pipe and terminate at the connection to the building plumbing. 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 Pawtucket Water Supply Board 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 connection points. The locations of connections and methods used must be acceptable to the Pawtucket Water Supply Board and the property owners. At the request of the property owner, outside connections to hose bibs shall include a "Y" type hose connection fitting at no additional cost to the PWSB.
- E. In the event that the Contractor deems it necessary to "drop" meters in customer's homes for connection to the bypass, he shall make arrangements to have members of the PWSB meter department present when the meters are reinstalled. Arrangements are to be made with the PWSB meter department supervisor and require a minimum of 24 hour prior notice. All meters will be inspected and resealed by the PWSB at this time. All existing meters are to be reinstalled with new leather gaskets provided by the PWSB. At the discretion of the Engineer, meters are to be reinstalled with the presence of a PWSB meter department official or "spot checked" for compliance. The Contractor is

responsible for all scheduling and notifications for the affected customers.

- F. 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.

3.02 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 Owner, 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 with 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 CONTROL".
- 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 required to restore pavement, sidewalks, and driveways damaged or displaced as a result of the work under the 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.

3.03 DISINFECTION

All temporary bypass lines, services and connections shall be disinfected 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.

3.04 DISCONNECTION AND REMOVAL OF TEMPORARY PIPING

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 condition 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 the overall "in-place" time.

3.05 PROTECTION

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, Pawtucket Water Supply Board mains and service piping, and for the protection of public health and safety.

3.06 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 re-excavate, 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 FURNISHING AND INSTALLING 2" BYPASS FEED as listed in the Bid.

3.07 TEMPORARY FIRE HYDRANTS

Where fire hydrants are by-passed, the Contractor shall furnish, install, maintain and 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-inch outlet complete with valve shall serve as a temporary hydrant. Temporary hydrants shall meet the approval of the Owner 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 the 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.

3.08 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 specified herein. No separate payment will be made for such work, but the cost thereof shall be deemed to be included in the work required under this section of the Specifications.

3.09 MEASUREMENT AND PAYMENT

A. Method of Measurement:

1. "TEMPORARY BYPASS PIPING AND SERVICES" shall be measured for payment at the unit linear foot (L.F.), as the actual laid length of bypass piping. No 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. Corporation Stops and connections to existing mains, where necessary, will not be measured separately for payment.

3. 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.

B. Method 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 all 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 one regardless of how many taps are needed to adequately supply water to or from the bypass. This item shall not include feeds for temporary bypass piping for building fire or domestic service connections.
4. Separate payment will not be made for temporary service 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 TEMPORARY BYPASS PIPE AND SERVICES as listed in the Bid.
5. Separate payment will not 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 TEMPORARY
BYPASS PIPE AND SERVICES as listed in the BID.

END OF SECTION

DIVISION THREE-MISC. CONCRETE WORK

SECTION 03310 - MISCELLANEOUS CONCRETE WORK

PART 1 - GENERAL

1.01 SCOPE OF WORK

The work covered under this section of the specifications consists of furnishing all labor, equipment, appurtenances and materials, and performing all operations in connection with providing the construction of all Class B concrete work for pipe cradles, encasements, and thrust blocks, and all Class A concrete work for walks, curbs, driveways and pavement, and all appurtenant, complete, in-place and accepted, in accordance with the Drawings and Specifications, and as directed by the Owner.

1.02 QUALITY ASSURANCE

- A. Class A concrete and Class B concrete shall have a compressive strength at the end of 28 days of not less than 3,500 and 3,000 pounds per square inch, respectively.
- B. Portland cement may be tested by the Owner.
- C. Aggregates may be tested by the Owner.
- D. Tests of Portland cement-concrete test specimens may be made by Owner. When required by the Owner, 6-inch by 12-inch test cylinders shall be made in accordance with the requirements of ASTM Designation: C 192, latest revision. Test cylinders will be tested in accordance with the requirements of ASTM Designation: C 39, latest revision. The cost of making laboratory tests for concrete work will be at the expense of the Owner, but the Contractor shall furnish the Owner the necessary labor, assistance and facilities for making, protecting, caring for and transporting the test specimens.
- E. The Owner shall have free access at all times to the batching and mixing plant for sampling of all material and inspection of work performed for this project.

1.03 STORAGE OF MATERIALS

- A. Cement shall be stored immediately upon receipt at the site of the work. Cements in sacks shall be stored in a suitable weatherproof structure which shall be as airtight as practicable; floors shall be elevated above the ground a distance sufficient to prevent the absorption of moisture. Sacks shall be stacked close together to reduce circulation of air, but shall not be stacked against outside walls; the manner of storage shall permit easy access for inspection and identification of each shipment. Bulk cement shall be transferred to elevated airtight and weatherproof bins. At the time of use, all cement shall be freeflowing and free from lumps. Cement that has hardened or partially set shall be removed from the site and not used in the work.

- B. Aggregates shall be stored on areas covered with tightly laid wood planks, sheet metal or other hard and clean surface, and in a manner that will preclude the inclusion of foreign material. Aggregate of different sizes shall be stored in separate piles. Stockpiles of coarse aggregate shall be built in horizontal layers not exceeding 4 feet in depth to avoid segregation. Should the coarse aggregate become segregated, it shall be remixed to conform to the grading requirements given herein.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Cement shall conform to the standard specifications for Portland cement of ASTM Designation: C 150 latest revision, Type 1, unless otherwise directed. Whenever directed by the Owner, a quick-setting cement shall be used for any purpose, at no additional expense to the Owner.
- B. Fine aggregate shall consist of washed sand having clean, hard, durable, uncoated grains free from deleterious substances and shall range in size from coarse to fine within the following percentages by weight.

- Passing No. 4 sieve-----95-100%
- Passing No. 16 sieve-----45-70%
- Passing No. 50 sieve-----15-30%
- Passing No. 100 sieve-----3-8%

Volume removed by sedimentation not more than 3%.

Fine aggregate shall conform in all other respects to ASTM Designation: C 33, latest revision.

- C. Coarse aggregate shall consist of crushed traprock, gravel or hard ledge stone, having clean, hard, durable, uncoated particles free from deleterious matter. The grading shall be within the following percentages by weight.

- Passing 1-1/2" sieve-----100%
- Passing 1" sieve-----95-100%
- Passing 1/2" sieve-----25-60%
- Passing No. 4 sieve-----0-10%

Coarse aggregate shall comply in all other respects to standards of ASTM Designation: C 33, latest revision.

- D. Mixing water for concrete shall be clean and shall be obtained from the municipal supply.

2.02 MIXES

- A. The proportioning of concrete materials shall be based on the requirements for a plastic and workable mix. Not less than six sacks (94 pounds per sack) of Portland cement per cubic yard, and not more than 6 gallons of water per sack of cement for Class A concrete and 6-1/2 gallons of water per sack of cement for Class B concrete shall be used in the mix. The surface water contained in the aggregates shall be included in the total water used. Slump shall not exceed 3 inches. Class A and Class B concrete shall attain a 28-day compressive strength of not less than 3,500 and 3,000 pounds per square inch, respectively, as determined by the "Standard Method of Making Compression Tests of Concrete", ASTM Designation: C39, latest revision. The design of the concrete mix to be used in the work shall be subject to the approval of the Owner.

2.03 FABRICATION

- A. Concrete shall be mixed until there is a uniform distribution of the materials, and shall be discharged completely before the mixer is recharged. It shall be transported in water-tight containers which will prevent segregation of the material. When placing the concrete, it shall be uniform throughout the mass. Concrete mixing shall conform to all requirements of ASTM Designation: C 94, latest revision, except as modified herein.
- B. The batching plant and mixing equipment shall have a capacity as required to perform the work within the specified time. Either a manual or semi-automatic plant may be used, subject to the approval of the Owner. A manual plant is defined as one in which batch weights are set manually and materials are batched manually. A semi-automatic plant is defined as one in which batching weights are set manually, mixes are charged manually and materials are batched automatically. All concrete shall be mixed in a control mixing plant unless the Owner specifically authorizes in writing job mixed or truck mixed concrete.
- C. Job-mixed concrete shall be mixed in a batch mixer for not less than one minute after all the material is in the mixer drum and until there is a uniform distribution of the material and the mass is uniform in color and is homogeneous. The mixer shall rotate at a peripheral speed of about 2000 feet per minute and shall not be loaded above its rated capacity.

PART 3 - EXECUTION

3.01 METHOD OF CONSTRUCTION

- A. Prior to placing the concrete, the Contractor shall be responsible for checking and maintaining the proper position of all parts to be embedded in Portland cement concrete.
- B. The placing of concrete shall be such that the concrete for each structure shall be placed in one continuous operation, except that

where construction joints are indicated the concrete shall be placed in one continuous operation between construction joints. Construction joints in addition to those indicated or changes in location of construction joints indicated will not be permitted except upon written permission of the Owner.

- C. Water shall be removed from excavations before concrete is deposited. Any flow of water shall be diverted through proper side drains and shall be removed without washing over the freshly deposited concrete. Hardened concrete, debris and foreign materials shall be removed from the interior of forms and from inner surfaces of mixing and conveying equipment. The subgrade for concrete work placed on gravel bedding shall be maintained in an approved, smooth and thoroughly compacted condition in conformity with the required section and grade until the concrete is in place. The subgrade shall be thoroughly moistened, but not muddy, at the time the concrete is deposited. No concrete shall be placed until forms and all work to be built into concrete have been satisfactorily installed and inspected.
- D. Concrete shall not be placed when the ambient temperature is below 35°F nor when the concrete without special protection is likely to be subjected to freezing temperature before the expiration of the specified curing period. If it is necessary to place concrete under conditions of low temperature, placement shall be approved by the Owner. The temperature of the concrete, when placed, shall be not less than 50°F nor more than 70°F. Heating of the mixing and/or aggregates will be required, as necessary, to maintain the minimum temperature of 50°F, and all methods and equipment for heating shall be satisfactory to the Owner. Materials shall be free from ice, snow and frozen lumps before entering the mixer. Suitable covering and other means shall be provided for maintaining the concrete to prevent freezing. Any concrete damaged by freezing shall be removed and replaced by the Contractor at no additional expense to the Owner.
- E. The gravel bedding on which concrete is placed shall be clean, damp, free from frost, ice and standing or running water and shall be thoroughly compacted in a satisfactory manner. Concrete shall be transferred from mixer to transport vehicle to place of final deposit in a continuous manner, as rapidly as practicable, and without segregation or loss of ingredients until the unit of construction is completed. Concrete that has attained its initial set or has contained its mixing water for more than 30 minutes shall not be placed in the work. Placing will not be permitted when, in the opinion of the Owner, the sun, heat, wind, temperature or limitations of facilities furnished by the Contractor prevent proper finishing and curing of the concrete. Forms shall not be splashed with concrete in advance of pouring. When placing concrete for encasements, precautionary measures shall be taken to prevent the displacement of piping or disturbing of joints of the piping; displaced or disturbed joints shall be corrected by the Contractor in a manner satisfactory to the Owner, at no additional expense to the Owner. Concrete shall be placed in the forms in uniform layers as nearly as practicable in final position.

- F. Crushed processed gravel bedding on which concrete is placed shall be as specified in Section 02211 "EARTH TRENCH EXCAVATION AND BACKFILL". Prior to placing concrete the gravel bedding shall be satisfactorily compacted.
- G. Immediately after removal of the forms, all fine and loose material shall be removed; honeycomb, aggregate pockets, voids and holes over 1/2 inch in diameter shall be cut out to solid concrete, thoroughly wetted, brush-coated with neat cement-grout and filled with cement-mortar composed of one part cement to two parts of fine aggregate. Patching of any surface irregularities, especially those resulting from honeycombing, shall be done only after inspection by the Owner for his determination as to whether or not the work is satisfactory enough to remain in the same plane as adjacent surfaces. Patchwork shall be damp-cured for 72 hours.
- H. Unformed exposed surfaces to receive masonry or mortar setting beds shall be finished by tamping the concrete with special tools to force aggregate away from the surface, then screening and floating to bring surfaces to the required finished levels and form, wood-floated to true even surfaces and then given a broom finish for the proper bonding of masonry or mortar. Other unformed surfaces shall be finished as directed. Formed surfaces to receive masonry shall be free from loose material, laitance or any other conditions which would impair the bonding of the masonry to the concrete.
- I. Curing shall be accomplished by preventing loss of moisture, rapid temperature change and mechanical injury or injury from rain or flowing water, and kept moist for a period of at least 7 days after placing. During this period, concrete shall be maintained at 70°F for at least 4 days or above 50°F for at least 7 days, unless otherwise directed. All concrete shall be damp-cured in a suitable and approved manner and curing shall be started as soon after placing and finishing as practicable.

3.02 PATCHING

- A. Any concrete which is not formed to the details as shown on the drawings or for any reason is out of alignment or level or shows a defective surface shall be considered as not conforming with the intent of these specifications and shall be removed from the job by the Contractor at no additional expense to the Owner, unless the Owner grants permission to patch the defective area. Careful attention shall be given by the Contractor to provide proper protection to newly placed sidewalks in order to guard against vandalism or any other acts that may result in damage to the finished concrete surface. The Contractor shall furnish and maintain this protection until the concrete is in a hardened state.
- B. Permission to patch defective work will not be considered a waiver of the right of the Owner to require complete removal of the defective

work, if, in the opinion of the Owner, the patching does not satisfactorily restore the quality and appearance of the surface.

3.03 METHOD OF MEASUREMENT

- A. Class A concrete for walks, curbs, driveways and pavement work will be measured for payment by the cubic yard (C.Y.) in-place, under the item "CLASS A&B CEMENT CONCRETE COMPLETE IN-PLACE", as listed in the BID.
- B. Class B concrete for pipe encasements, pipe cradles, thrust blocks and appurtenant work will be measured for payment by the cubic yard (C.Y.), in-place, under the item (CLASS A&B CEMENT CONCRETE COMPLETE IN-PLACE", as listed in the BID.

3.04 BASIS OF PAYMENT

- A. The quantity of Class A and Class B concrete, determined as provided in the preceding paragraphs will be paid for at the unit prices bid as listed in the BID; which shall constitute full compensation for all equipment, tools, materials forms, bracing, mixing, delivering, placing compacting, furnishing, curing and protecting, installing miscellaneous materials to be embedded in concrete, and for all labor, and incidentals necessary to complete the items in accordance with the Specifications and Drawings, and as directed by the Owner. No payment will be made for concrete until it has been satisfactorily cured and approved by the Engineer.

END OF SECTION

APPENDIX A



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WATER MAIN DISINFECTION PROCEDURE

The following procedures shall be strictly adhered to after the installation of new water mains, the cleaning and lining of existing water mains, or as directed by the Pawtucket Water Supply Board.

DISINFECTION PREPARATIONS

- a. The Contractor shall utilize a by-pass piping system for flushing, filling, testing and chlorination of various sized water mains. The by-pass piping shall consist of corporation stops or valves on the supply line and the main to be filled. A reduced pressure zone device (relief valve between two check valves) shall be installed in the temporary piping system to insure that no water is allowed to return to the supply line. Fire hydrants may be utilized for feed points only if properly flushed and the above by-pass piping is installed. Fire hydrants SHALL NOT be used as sample points. Line valves SHALL NOT be used under any circumstances to fill, flush, test or chlorinate water mains. Newly installed water main SHALL NOT be physically connected to an existing distribution system water main until all flushing, disinfection and testing has been completed.
- b. During construction or cleaning water main sections, joints and valves must be kept CLEAN and DRY as possible.
- c. A corporation stop shall be provided within 5 feet of the beginning of the new main for feeding of the liquid chlorine, and at sampling locations designated by the Pawtucket Water Supply Board Chemist or a member of the Engineering staff. These sampling locations shall be within 10 feet of the end of the section of main to be chlorinated. This will be to provide for sampling points along the main. Hydrants shall not be used for sampling points but may be used as a feed point for chlorination. Copper tubing shall be used for all chlorination and sampling pipe.
- d. Chlorination of valves, fittings, and short lengths (under 50 feet long), of main shall be disinfected by contact swabbing and/or brushing with a 4-percent NSF-61 approved sodium or calcium hypochlorite solution.
- e. Mains shall be pressure tested to 1.5 times the system working pressure, and shall be required to hold pressure for at least two hours. This shall be verified by a member of the Water Supply Engineering Department.

DISINFECTION OF WATER MAINS, TEMPORARY MAINS, AND SERVICES

All mains and appurtenances shall be disinfected with NSF-61 approved chlorine in accordance with provisions of the American Water Works Association Standard C651, latest revision thereof, AND as follows:

- a. Water mains and services shall be thoroughly flushed. Flushing shall be at a rate sufficient to create a water velocity of at least 3.0 feet per second through the pipe. A turbidity reading of less than 5.00 NTU and a

color of less than 15 Hazen units must be verified by the Water Supply Representative prior to introduction of chlorine.

- b. NSF-61 approved liquid chlorine in the form of sodium hypochlorite with a concentration of 5-15% shall be introduced into the main(s) to be tested. The chlorine solution must come into contact with ALL sections of the main that is to be disinfected. The whole main must be filled with chlorinated water (no air), and the concentration of such water must not be less than 25 milligrams per liter as verified by a Water Supply Representative.
- c. The superchlorinated water must stand isolated in the main for at least twenty four (24) hours. After this MINIMUM retention time, the Water Supply Representative will re-test the concentration of chlorine in the main at all the sampling points. The concentration must be a least 10 mg/L. If concentration is below this level, step (b) must be repeated.
- d. Once the concentration is verified, the superchlorinated water must be flushed from the main through the various sampling points until the concentration of residual chlorine at each sampling point reaches a level of no higher than 1.5 mg/L (or system level) and turbidity of less than 1.00 NTU (or system level) as verified by the Water Supply Representative.
- e. Microbiological testing will be done a minimum of 16 hours after step (d) has been completed, but BEFORE the main is put into service. A Water Supply Representative will obtain samples at all sampling points along the main for analysis to determine if coliform bacteria is present. These samples are tested in accordance with the Enzyme Substrate Coliform Test (SM-9223B) and, if required, the Standard Heterotrophic Plate Count Procedure (SM-9215B). Within 24 hours the results will be made available by the Water Supply Chemist. If results indicate the presence of coliform bacteria, further flushing will be required, and new samples must be obtained. Once the main has been certified by the Water Supply Chemist, the main may be place into service with permission of the Chief Engineer.
- f. Under certain conditions, an emergency type chlorination may be conducted with the written approval of the Chief Engineer.

DISPOSING OF HEAVILY CHLORINATED WATER

FINAL FLUSHING - Disposal of heavily chlorinated water shall be in in accordance with provisions of the American Water Works Association Standard C651, latest revision thereof, AND as follows:

Heavily chlorinated water that possibly may discharge as runoff to any body of water, river or stream shall be neutralized by treating with sulfur dioxide. Such locations shall be determined by the Water Supply Representative. The primary choice of neutralizing agent is sulfur dioxide but the contractor may use, if requested, an approved substitute as listed in AWWA Std. C655, latest revision. The chlorine residual of the discharge flow shall be continuously monitored to allow the adjustment of the sulfur dioxide feed to thoroughly neutralize the water discharge. Otherwise, all other heavily chlorinated water will be discharged as runoff to the roadway surface or to the sewer system which shall be in accordance with the current rules and regulations governed by the local sewer authority. The following list is of the streets in Pawtucket that have drains that empty directly into a river and therefore any discharge must be dechlorinated before entering into the drainage system.

List of Streets in Pawtucket with Storm Drains Emptying into River
All Heavily Chlorinated Water Must Be Dechlorinated Prior to Discharge

| <u>Street</u> | <u>Section of Street</u> |
|-------------------------------|---------------------------------|
| Archer St. | Clews to Maplecrest |
| Arland Ave. (North not South) | Rice to Pinecrest |
| Armistice Blvd. | All of the Street |
| Central Ave. | Arland to Diana |
| Daggett Ave. | Huthinson to Central |
| Daggett Ave. | Winsor to Stafford |
| Daggett Ave. | Lindesta to Eddington |
| Eddington St. | All of the Street |
| Fenwood Ave. | All of the Street |
| Grosvenor Ave. | All of the Street |
| Grotto Ave. | Power to Legion Dr. |
| Huthinson Ave. | All of the Street |
| Leather Ave. | All of the Street |
| Liverpool St. | Bristol to London |
| London Ave. | All of the Street |
| Manton St. | All of the Street |
| Maplecrest Dr. | Archer to Karen |
| Maryland Ave. | All of the Street |
| Nathael Ave. | All of the Street |
| Parkside Ave. | All of the Street |
| Pearson Ave. | All of the Street |
| Piave St. | All of the Street |
| Rice St. | Kirk to Arland |
| Riverview Ave | All of the Street |
| Roosevelt Ave. | Exchange to Leather |
| School St. | Exeter to Beverage Hill |
| Service Rd. | All of the Street |
| Smithfield Ave. | Piave to Grotto |
| Stafford St. | All of the Street |
| Talcott Ave. | All of the Street |
| Terrace Ave. | All of the Street |
| Varnum Ave | All of the Street |



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PAWTUCKET WATER SUPPLY BOARD

WATER MAIN DISINFECTION PROCEDURE SUMMARY

A. PRESSURE TEST:

NOTIFY PWSB LABORATORY THAT MAIN IS READY FOR TESTING & DISINFECTION. 1.5 TIMES THE SYSTEM WORKING PRESSURE FOR 2 HOURS. COMPLIANCE CHECKED BY THE WATER SUPPLY BOARD ENGINEERING DEPT.

B. FLUSHING:

FLUSH AT VELOCITY OF AT LEAST 3.0 FEET PER SECOND. TURBIDITY AND COLOR WILL BE VERIFIED BY WATER SUPPLY REPRESENTATIVE. TURBIDITY MUST BE LESS THAN 5.00 NTU AND COLOR LESS THAN 15 UNITS BEFORE CHLORINE CAN BE ADDED.

C. CHLORINATION:

ADD NSF-61 APPROVED LIQUID CHLORINE TO OBTAIN A MINIMUM CONCENTRATION OF 25 mg/L. WATER SUPPLY REPRESENTATIVE WILL TEST FOR COMPLIANCE. ALLOW TO STAND FOR 24 HOURS. RESIDUAL MUST BE NOT LESS THAN 10 mg/L. WATER SUPPLY REPRESENTATIVE WILL TEST FOR COMPLIANCE.

D. MICROBIOLOGICAL SAMPLING:

FLUSH HEAVILY CHLORINATED WATER FROM MAIN, UNTIL CHLORINE IS NO HIGHER THAN 1.50 mg/L (or system level) AND TURBIDITY IS LESS THAN 1.00 NTU (or system level). ONCE MAIN HAS BEEN ALLOWED TO STAND FOR A MINIMUM OF 16 HOURS, THE WATER SUPPLY REPRESENTATIVE WILL TAKE SAMPLE(S) FOR COLIFORM BACTERIA (AND HPC, IF REQUIRED) TESTS. WATER SUPPLY CHEMIST WILL ADVISE OF COMPLIANCE WITHIN 24 HOURS.

E. COMPLIANCE AND CERTIFICATION:

WATER SUPPLY CHEMIST WILL SEND DISINFECTION CERTIFICATE TO WATER SUPPLY ENGINEERING.

WATER SUPPLY ENGINEERING WILL ADVISE WATER SUPPLY T&D SUPERVISOR OR CONTRACTOR TO TIE IN AND PLACE MAIN IN SERVICE.

NO MAIN SHALL BE TURNED ON WITHOUT WATER SUPPLY CHEMIST CERTIFICATE OF COMPLIANCE.

NOTE: IF COLIFORM TESTING IS POSITIVE, STEPS C. AND D. MUST BE REPEATED.

APPENDIX B

Pawtucket Proposed Water Main Replacement MR-14

| Street | Limits | Length |
|---------------|--------------------------------|--------|
| Archer St | Rice to Revere | 515 |
| Bayley St | Pine to Main/Dexter | 872 |
| Benefit St | Madison to Pinecrest | 2,374 |
| Blackburn St | Elmcrest to Cottage | 394 |
| Cedarbrook Rd | Mill to Cottage | 589 |
| Central Ave | Newport to Benefit | 3,281 |
| Clews St | Benefit St to dead end | 2,125 |
| Commerce St | Bayley to Main | 352 |
| Crest Dr | Revere to Pinecrest | 415 |
| Day St | Beverage Hill Ave to Plain St | 606 |
| Dunnell Lane | Prospect to Dunnell Lane East | 653 |
| Elmcrest Dr | Blackburn to Cottage | 453 |
| Flint St | # 47 Flint to # 148 Flint | 968 |
| Grand View Rd | Dora to Power | 766 |
| Grosvenor Ave | Sando to Power | 1,046 |
| Katama Rd | Naushon to Naushon | 787 |
| Lake St | Bacon to #45 Lake | 584 |
| Main St | Ann Mary to West | 710 |
| Maple St | Main to Summer | 400 |
| Mayfield St | Evergreen to Walcott | 780 |
| Moshassuck St | Main to Esten | 830 |
| Naushon Ct | Naushon to #16 Naushon Ct | 155 |
| Naushon Rd | Alex McGregor to Alex McGregor | 1,988 |
| Peckham St | Newport to Grand | 496 |
| Pequot Rd | Naushon to MA line | 1,298 |
| Prentice Ave | Power to Smithfield | 1,182 |
| Revere St | Archer to Weldon/Crest | 481 |
| Riley St | Mendon to Kenyon | 1,071 |
| Tashmoo Way | Naushon to Naushon | 580 |
| Terrace Ave | Windmill to Dora | 314 |
| Trieste St | Power to Buchanan | 702 |
| Varnum Ave | Power to Fiume | 828 |
| Wasburn St | Ames to #22 Wasburn | 240 |
| Welden St | Rice to Revere | 575 |

Total 29,410 ft