

CITY OF PAWTUCKET

REQUEST FOR PROPOSALS



Bid #23-014
Prospect Heights Sewer Reconstruction

10/21/2022

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1.0 - Bid/Solicitation Information

Schedule

Pre-Bid/Proposal Conference: ☐ No ☒ Yes
October 31, 2022 @ 11:00 AM

***** **Mandatory** *****

Location:

Dept of Public Works
250 Armistice Blvd
Pawtucket RI, 02860

Requests for Further Information:

November 4, 2022 @ 4:00 PM

Requests for information or clarification must be made electronically to the attention of:

Emily Morse, GIS Coordinator

E-mail: emorse@pawtucketri.com

CC: Peter Wingate, Purchasing Director

E-mail: pwingate@pawtucketri.com

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

RFP Submission Deadline:

November 10, 2022 at 12:00 PM

Late submittals will not be considered.

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

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

Bonds/Surety Required

Bid 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 five percent (5%) of the bid price.

Fidelity Bond: ☐ No ☐ Yes

Performance and Payment Bond: ☐ No ☒ Yes
(Submit upon award of contract)

Bidder is required to provide a performance and payment bond as outlined in the City's General Terms & Conditions of Purchase (Appendix B of this RFP) in an amount not less than one hundred percent (100%) of the bid price.

The successful bidder will be required to furnish all insurance documentation as outlined in the attached Purchasing Rules & Regulations and General Terms & Conditions of Purchase.

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 RFP 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

- It is the vendor's responsibility to examine all specifications and site 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 RFP deadline.
- Prior to the proposal deadline established for this RFP, 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 RFP 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.**
- At the time and place fixed for the opening of Bids, the Owner will cause to be opened and publicly read aloud every Bid received within the time set for receiving Bids, irrespective of any irregularities therein. Bidders and other persons properly interested may be present, in person or by representative.
- It is intended that an award pursuant to this Request 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 Request for Proposals 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 RFP shall become the property of the City of Pawtucket upon delivery to the Purchasing Agent.
- Bids will be opened publicly at a regularly scheduled purchasing board meeting, the date of which is the same as the RFP submission deadline provided in Section 1.0.
- Interpretations or Addenda: No oral interpretation will be made to any Bidder as to the meaning of the Contract Documents or any part thereof. Every request for such an interpretation shall be made in writing to the City of Pawtucket (hereinafter called the "Owner"). Any inquiry received seven or more days prior to the date fixed for opening of Bids will be given consideration. Every interpretation made to a Bidder will be in the form of an Addendum to the Contract Documents, and when issued, will be on file in the office of the Owner at least five days before Bids are opened. In addition, all Addenda will be mailed to each person holding Contract Documents, but it shall be the Bidder's responsibility to make inquiry as to the Addenda issued. All such Addenda shall become part of the Contract and all Bidders shall be bound by such Addenda, whether or not received by the Bidders.
- Each Bidder shall, upon request of the Owner, submit a detailed financial statement on a form furnish by the Owner for that purpose. The Owner shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform his obligations under the Contract and the Bidder shall furnish the Owner all such information and data for this purpose as it may request. The right is reserved to reject any Bid where an investigation of the available evidence or information does not satisfy the Owner that the Bidder is qualified to carry out properly the terms of the Contract.

3.0 - Overview

3.1 Project Overview

This project is for the reconstruction of the existing Prospect Heights sanitary sewerage system to remove the siphon under the existing drainage on Beverage Hill Avenue and replace it with a gravity sewer main and relocation of the existing drainage system along Beverage Hill Avenue from approximately Notre Dame Avenue to the intersection of Beverage Hill Avenue/Prospect Street/Fortin Avenue in Pawtucket, RI. The work encompassed in this project is further described in Section 4.3 below.

3.2 Project Background

This project is intended to reconstruct the existing 24-inch sewer pipe connecting the Prospect Heights housing development to the The City of Pawtucket sewer system within Beverage Hill Avenue. Currently, the housing development sewer pipe is routed underneath an existing 60-inch drain pipe under Beverage Hill Avenue, acting as a siphon. This siphon caused regular back up of sewage flows and requires frequent jetting. The sewer is proposed to be reconstructed to a gravity sewer to prevent back-ups caused by the siphon. The project is being funded by Rhode Island Infrastructure Bank (RIIB) under the Clean Water State Revolving Fund (CWSRF). All permitting shall be in accordance with Federal, municipal and state standards.

4.0 - Scope of Work

4.1 Location

The location of the proposed construction activity (“the Project”) is shown on the Site Plans Issued for Bid included in this RFP as Appendix D. In general terms, the location of the Project can be described as follows:

- Beverage Hill Avenue from Notre Dame Avenue to the intersection of Beverage Hill Avenue/Prospect Street/Fortin Avenue; and
- Portions of the following properties:
 - Assessor’s Plat (A.P.) 38, Lots 0391 (Pawtucket Redevelopment 123 LP Housing Authority)

4.2 General Requirements

4.2.1 Project Schedule

Contract Award and Startup:

- No work will be permitted prior to the “Notice to Proceed” except for procurement of materials and pre-construction activities as mentioned in the Contract Specifications. The “Notice to Proceed” is anticipated for **March 22, 2023.**
- Construction is expected to begin **April 1, 2023**

Contract Completion Date.

- **All work must be completed no later than July 1, 2023**

The Bidder will guarantee that the work will be completed in 90 days from the start of Construction.

4.2.2 Hours of Work

Work shall be conducted on the weekdays only from the hours of 7:00 a.m. to 3:00 p.m. unless written approval has been received from the City of Pawtucket to deviate from these hours of operations and working days.

4.2.3 Pricing

UNIT PRICES: The unit price for each of the several items in the Proposal of each Bidder shall include its pro rata share of overhead and profit so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price Bid represents the Total Bid. The price submitted for items requiring a lump sum Bid shall also include all overhead and profit and represents the total Bid. Any Bid not conforming to this requirement may be rejected as unresponsive. The special attention of all Bidders is called to this provision, for should conditions make it necessary to revise the quantities or unit price, no limit will be fixed for such increased or decreased quantities nor extra compensation allowed, provided the net monetary value of all such additive and subtractive changes in quantities of such items or work (i.e., difference in cost) shall not increase or decrease the original contract price by more than twenty-five percent (25%) except for work not covered in the Contract Documents.

4.2.4 Prevailing Wage Requirements

Bidders are advised that payment of the local prevailing wage, as established by the Rhode Island Department of Labor and Training, is a requirement of this project, as outlined in Appendix B. A copy of the current prevailing wage decision is included in this document as Appendix C. Bidders are advised that the City will not amend this document prior to the bid due date for the purpose of notifying bidders of a superseding wage decision(s). Bidders are expected to account for the prevailing wage rates applicable to this project in the formulation of their bid.

4.2.5 Payment Requisitions

The Contractor shall prepare draft requisitions for payment for the Project Engineer's review and approval and revise the requisitions as necessary prior to submission to the Owner. Payment requisitions shall be prepared using the following three sheets attached in Appendix G- "RI Certified Weekly Payroll Form", "RI Statement of Compliance Form", and "Federal Department of Labor Statement of Compliance Form."

For any questions on how to fill out the RI forms, please contact RI Department of Labor and Training, Prevailing Wage Section.

The Owner reserves the right to withhold 5% of each progressive request for payment as retainage. The Owner shall release retainage payments per the terms outlined in Section 12.0 of this RFP.

4.3 Scope Detail

The scope of work is defined comprehensively in the Site Plans and Specifications issued for bid, which are incorporated into this RFP as Appendices D and E, respectively.

In general terms, the Project includes, but is not limited to, removal and disposal of existing pavement, unsuitable excavated materials, existing sidewalk and concrete curb; removal and disposal of existing drainage system, including catch basins, manholes and pipes; abandoning existing drain and sewer pipe in place, including cutting and plugging; removal and disposal of existing sanitary sewer pipe; trench excavation including support of excavation, dewatering and support of utility structures; installation of new drainage system, including but not limited to catch basins, manholes, pipes, frame and grates and frame and covers, tying existing pipes into new drainage structures, pipe bedding, suitable backfill material, temporary and permanent trench patching; installation of new sanitary sewerage system including but not limited to, pipe, reconstructing the bottom and inverts of the existing sewer manhole, tying new pipes into the existing sanitary sewer structures, cutting the new pipe into the existing drainage system, pipe bedding, suitable backfill material, temporary and permanent trench patching; installation of new concrete curbing, sidewalk and wheelchair ramp, including detectable warning panel; soil erosion and dust control; loam and seed; traffic management: pavement striping; and all equipment, labor, materials, supplies and all other incidentals necessary to complete the work in place and accepted by the Engineer.

5.0 - Insurance

The vendor shall maintain and keep in force such comprehensive general liability insurance as shall protect them from claims which may arise from operations under any contract entered into with the City of Pawtucket, whether such operations be by themselves or by anyone directly or indirectly employed by them.

The amounts of insurance shall be not less than \$1,000,000.00 combined single limit for any one occurrence covering both bodily injury and property damage, including accidental death.

The City of Pawtucket shall be named as additional insured on the vendor's General Liability Policy.

The vendor shall maintain and keep in force such Workers' compensation insurance limits as required by the statutes of the State of Rhode Island, and Employer's Liability with limits no less than \$500,000.

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

All bids must be submitted on the forms supplied in Section 11.0 and shall be subject to all requirements of the Contract Documents, including these instructions to bidders. All bids must be regular in every respect and no interlineations, excisions or special conditions shall be made or included in the Bid Form by the Bidder. Pricing must include all costs as specified in this solicitation.

The Owner may consider as irregular any Bid on which there is an alteration of or departure from the Bid Form hereto attached and at its option may reject the same.

Bid Documents, including the Bid, the Bid Bond, the Non-Collusion Affidavit, the Anti-Kickback Acknowledgment, and the Statement of Bidder's Qualifications (if requested) shall be enclosed in a sealed envelope which shall be clearly labeled with the words, **“Prospect Heights Sewer Reconstruction, 23-014”** as well as name of Bidder, and date of bid opening.

All Bid Forms must be signed.

If the Contract is awarded, it will be awarded by the Owner to a responsible Bidder on the basis of the lowest qualified bid price and the selected Alternative Bid items, if any.

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 RFP, 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 RFP, please list their name(s), contractor license #, address and phone number, and specific description of the subcontract work to be performed. See Proposed Subcontractors form.

Two (2) copies of your proposal—one (1) original hard copy and one digital (1) copy on CD or similar format—must be submitted at the time of submission. Proposals must be in the following format:

- Bid Form

- Company overview

- Length of time your firm has been in business

- Length of time at current address

- All licensing (List types and business license number(s)), certification and permits as required in the Scope of Work

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 RFP.

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 Vendor who submits a proposal in response to this RFP and to award a contract based upon the results of those negotiations alone. The City reserves the right to consider as unqualified to do the work of general construction any Bidder who does not habitually perform with his own forces the major portions of the work involved in construction of the Improvements embraced in this Contract.

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 three (3) 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 RFP.
2. The second phase is an in-depth analysis and review based on criteria below and their associated weights.

<u>Evaluation Criteria</u>	<u>Importance</u>
Experience/Qualifications	20%
References	10%
Price	70%

3. The third is a comparison of each proposal's weighted evaluation relative to the costs proposed.

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 City reserves the right to pay the selected Vendor via credit card at its sole discretion.

11.0 – Bid Form

23-014 – Prospect Heights Sewer Reconstruction

Date: _____

Submitted By: _____

(Include Name, Address and Telephone No.) _____

Name and remittance address that will
appear on invoices:

Physical address of business:

General Information

Is your firm a sole proprietorship doing business under a different name?

____ Yes ____ No

If yes, please indicate sole proprietorship, a name, and the name you are doing business under.

Is your firm incorporated? ____ Yes ____ No

Will any of the work spelled out in this bid be outsourced? ____ Yes ____ No

If so, please explain below:

Have you or your firm been subject to suspension, debarment or criminal conviction by the City of Pawtucket, the State of Rhode Island, or any other jurisdiction?

Yes: _____ No: _____

Have the City of Pawtucket and/or the State of Rhode Island ever terminated contracts with your firm for cause?

Yes: _____ No: _____

Has your firm ever withdrawn from a contract with the City of Pawtucket and/or the State of Rhode Island during its performance?

Yes: _____ No: _____

Have you or your firm been involved in litigation against the City of Pawtucket and/or the State of Rhode Island.

Yes: _____ No: _____

If you answered yes to any of the foregoing, please explain the circumstances below. If you or your firm has been involved in litigation against the City of Pawtucket and/or the State of Rhode Island, please include the case caption, case number and status. (If more space is needed, please attach separate sheet and submit with the bid.)

Is your company bonded? Yes ____ No ____

Please describe the nature and extent of all insurance coverage:

Addenda

The following Addenda have been received. The noted modifications to the Bidding Documents have been considered and all costs are included in the Bid Sum.

Addendum #1, Dated: _____

Addendum #2, Dated: _____

Addendum #3, Dated: _____

References

Please list at least four (4) companies' with whom you have contracted to provide similar services. Preferably, references should be municipalities which are of approximate size as the City of Pawtucket, and a website address should be included if available.

Reference #1

Company Name: _____

Contact Person: _____ Telephone #: _____

Contract Dates: _____ To _____

Website Address: _____

Reference # 2

Company Name: _____

Contact Person: _____ Telephone #: _____

Contract Dates: _____ To _____

Website Address: _____

Reference # 3

Company Name: _____

Contact Person: _____ Telephone #: _____

Contract Dates: _____ To _____

Website Address: _____

Reference # 4

Company Name: _____

Contact Person: _____ Telephone #: _____

Contract Dates: _____ To _____

Website Address: _____

Pricing Proposal
#23-014
Prospect Heights Sewer Reconstruction

1.00 OFFER:

- A. Having examined the Place of the Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by Pare Corporation (Engineering firm for the above mentioned project) and the City of Pawtucket, we, the undersigned, hereby offer to enter into a Contract to perform the Work, (**Prospect Heights Sewer Reconstruction**), for the amount indicated below, subject to the additions and deductions according to the terms of the Contract Documents and as stated below. The undersigned will provide all necessary and proper material, machinery, equipment, facilities, and means to complete the Work.
- B. The undersigned hereby understands that the City of Pawtucket (Owner) has the right to reject any and all bids and to award the contract in the best interests of the Owner. The Owner reserves the right to award the entire project or delete portions of the work to funds available, whichever is in the best interest of the Owner.
- C. The undersigned also understands that the contract must be carried out in strict accordance with the contract documents.

Total Price: \$.....dollars,
(amount in words)

(\$.....) in lawful money of the United States of America and,
(in figures)

We have included herewith, the unit price bid forms, bid alternates information, and the required security deposit or Bid Bond as required by the Instruction to Bidders.

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NOTE: THE UNIT PRICE FOR EACH ITEM MUST BE WRITTEN IN WORDS AND FIGURES. IN CASE OF DISCREPANCY, THE AMOUNT SHOWN IN WORDS WILL GOVERN.

ITEM NO.	DESCRIPTION AND UNIT PRICES WRITTEN	ESTIMATED QUANTITY	ITEM AMOUNT
1	Mobilization and Demobilization Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Lump Sum 1	\$ _____
2	Erosion and Sediment Control Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Lump Sum 1	\$ _____
3	Traffic Control and Management Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Lump Sum 1	\$ _____
4	Remove and Dispose Concrete Curb Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Linear Foot 165	\$ _____
5	Remove and Dispose Sidewalks Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Square Yard 138	\$ _____
6	Remove and Dispose Flexible Pavement Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Square Yard 945	\$ _____
7	Cutting and Disposing Isolated Trees and Stumps (4"-24") Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 1	\$ _____
8	Remove and Dispose Catch Basins Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 2	\$ _____
9	Remove and Dispose Manholes Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 1	\$ _____

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ITEM NO.	DESCRIPTION AND UNIT PRICES WRITTEN	ESTIMATED QUANTITY	ITEM AMOUNT
10	Remove and Dispose Pipes- All Types and Sizes Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Linear Foot 130	\$
11	Remove and Dispose Frame and Grate or Frame and Cover Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 4	\$
12	Earth Excavation Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Cubic Yard 55	\$
13	Common Borrow Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Cubic Yard 164	\$
14	Structure Rock Excavation- Mechanical Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Cubic Yard 30	\$
15	Trench Rock Excavation- Mechanical Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Cubic Yard 150	\$
16	Gravel Borrow Subbase Course Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Cubic Yard 212	\$
17	Class 19.0 HMA for Patching Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Ton 135	\$
18	Class 12.5 HMA for Patching Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Ton 81	\$

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ITEM NO.	DESCRIPTION AND UNIT PRICES WRITTEN	ESTIMATED QUANTITY	ITEM AMOUNT
19	Class 9.5 HMA for Miscellaneous Work Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Ton 10	\$
20	Asphalt Emulsion Tack Coat Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Square Yard 470	\$
21	Temporary Patching Materials/Trench Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Ton 162	\$
22	Reinforced Concrete Pipe (RCP) M 170 Class III* 12” Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Linear Foot 4	\$
23	Reinforced Concrete Pipe (RCP) M 170 Class III* 15” Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Linear Foot 136	\$
24	Reinforced Concrete Pipe (RCP) M 170 Class V* 24” Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Linear Foot 301	\$
25	¾” Crushed Stone Pipe Bedding Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Cubic Yard 530	\$
26	Polyvinyl Chloride (PVC) Sewer Pipe- 24” Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Linear Foot 40	\$

#23-014 – Prospect Heights Sewer Reconstruction

ITEM NO.	DESCRIPTION AND UNIT PRICES WRITTEN	ESTIMATED QUANTITY	ITEM AMOUNT
27	Frame and Grate- Heavy Duty (Bicycle Safe) Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 3	\$
28	Frame and Cover- Heavy Duty Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 5	\$
29	Frame and Cover- Light Duty Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 2	\$
30	Precast Concrete Apron Stone 38" Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 2	\$
31	Precast 4'-0" Round Catch Basin Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 2	\$
32	Precast 4'-0" Round Manhole Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 1	\$
33	Precast 4'-0" Round Manhole (Greater than 12'-0" in Depth) Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 2	\$
34	Precast 6'-0" Round Manhole (Greater than 12'-0" in Depth) Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 3	\$

#23-014 – Prospect Heights Sewer Reconstruction

ITEM NO.	DESCRIPTION AND UNIT PRICES WRITTEN	ESTIMATED QUANTITY	ITEM AMOUNT
35	Precast 8'-0" Round Manhole (Greater than 12'-0" in Depth) Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 1	\$
36	Plug and Cap Pipe- All Sizes Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 13	\$
37	Cleaning and Flushing Pipe- All Types and Sizes Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Linear Foot 800	\$
38	Cleaning Catch Basins- All Types and Sizes Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 10	\$
39	Portland Cement Sidewalk Monolithic Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Cubic Yard 17	\$
40	Cement Concrete Curb Precast- Straight Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Linear Foot 108	\$
41	Cement Concrete Curb Precast- Circular Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Linear Foot 44	\$
42	Precast Concrete Wheelchair Ramp Curb Transition Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 2	\$

#23-014 – Prospect Heights Sewer Reconstruction

ITEM NO.	DESCRIPTION AND UNIT PRICES WRITTEN	ESTIMATED QUANTITY	ITEM AMOUNT
43	Precast Concrete Ramp Stone 18-Inch- Circular Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 1	\$
44	Test Pits (Paved or Unpaved) Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 10	\$
45	Full Depth Sawcut of Bituminous Pavement Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Linear Foot 2,080A	\$
46	Full Depth Sawcut of Portland Cement Concrete Sidewalks and Driveways Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Linear Foot 75	\$
47	Reconstruct Brick Shelf and Manhole Invert Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 1	\$
48	Loam Borrow 4 Inches Deep Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Square Yard 40	\$
49	Seeding Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Square Yard 40	\$
50	Detectable Warning Panel Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Square Foot 8	\$
51	Adjust Frame and Grate to Grade Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 2	\$

ITEM No.	DESCRIPTION AND UNIT PRICES WRITTEN	ESTIMATED QUANTITY	ITEM AMOUNT
52	Adjust Frame and Cover to Grade Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Each 5	\$ _____
53	Final Epoxy Resin Pavement Markings Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Lump Sum 1	\$ _____
54	Unsuitable Material Below Grade Excavation and Disposal Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Cubic Yard 150	\$ _____
55	Pavement Cores Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Lump Sum 1	\$ _____
56	Policing (Allowance) Unit Price in Figures: \$ _____ Unit Price in Words: _____ _____	Man Hours 320	\$ _____
	Base Bid: Prospect Height Sewer Reconstruction The sum price of: Total Base Bid Price in Words: _____ _____ _____	Total Price Bid	\$ _____

Note: Total Bid shown above shall match Total Price shown on the first page of this bid form. All project costs including labor, equipment, materials, overhead, and profit to complete the Work shall be included. Refer to Appendix F Section 01025, Measurement and Payment for a description of the bid items listed above as well as additional information.

1.00 ALLOWANCES:

As part of the Base Bid (Total Bid), the bidder agrees to carry quantities of materials below in the base bid of the contract. The Owner reserves the right to remove these items from the contract totally or in part and to adjust the contract sum to reflect the actual costs of the construction authorized by the Owner. Unit prices reflect replacement with suitable materials. Refer to Section 01025, Measurement and Payment for additional information.

2.00 ACCEPTANCE:

#23-014 – Prospect Heights Sewer Reconstruction

If this Bid is accepted within the time stated in the contract documents, and we fail to commence the Work, the Bid Bond shall be forfeited as damages to the Owner by reason of our failure, limited in amount to the lesser of the face value of the Bid Bond or the difference between this Bid and the Bid upon which the Contract is executed.

In the event our Bid is not accepted within the time stated in the contract documents, the required Bid Bond shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

The City of Pawtucket reserves the right to increase or decrease the quantities stated in the bid at the unit prices quoted.

3.00 BID FORM SIGNATURE(S)

The Corporate Seal of

(Bidder - please print the full name of your Proprietorship, Partnership, or Corporation)

was hereunto affixed in the presence of:

(Authorized signing officer Title)

(Seal)

(Authorized signing officer Title)

If the Bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture in the appropriate form or forms as above.

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of _____)
County of _____) ss

being first duly sworn, deposes and says that;

(1) He is _____ (owner, partner, officer, representative or agent) of _____, the BIDDER that has submitted the attached bid;

(2) He is fully informed respecting the preparation and contents of the attached Bid and all pertinent circumstances respecting such Bid;

(3) Such Bid is genuine and is not a collusive or sham Bid;

(4) Neither the said BIDDER nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including the affiant, has in any way colluded, conspired or agreed, directly or indirectly, with any other BIDDER, firm or person to submit a collusive or sham bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such a contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other BIDDER, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other BIDDER, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Local Government or any person interested in the proposed Contract; and

(5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the BIDDER or any of its agents, representatives, owners, employees or parties in interest including this affiant.

(Signed) _____

(Title)

Subscribed and sworn to before me

This _____ Day of _____, 20 _____

My Commission Expires _____

CERTIFICATE OF COMPLIANCE WITH TAX LAWS

I, _____ of _____, certify under
(principal) *(corporation)*
pains and penalties of perjury that said corporation has complied with all the laws of the State of Rhode Island and
Providence Plantations relating to taxes.

Date

Signature

Title

Federal Tax Identification Number

END OF SECTION

12 – General Conditions – AIA Document A201

GENERAL CONDITIONS

AIA DOCUMENT A201, 2007 EDITION

PART I – GENERAL

DESCRIPTION

- A. AIA Document A201, General Conditions of the Contract for Construction, Sixteenth Edition, 2007.

DRAFT AIA® Document A201™ – 2007

General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

Prospect Heights Sewer Reconstruction
Beverage Hill Avenue- Pawtucket, RI

THE OWNER:

(Name, legal status and address)

City of Pawtucket

« »

137 Roosevelt Avenue, Pawtucket, RI 02860

THE ARCHITECT:

(Name, legal status and address)

Pare Corporation

8 Blackstone Valley Place, Lincoln, RI 02865

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 BASIC DEFINITIONS

§ 1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding requirements.

§ 1.1.2 THE CONTRACT

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

§ 1.1.3 THE WORK

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 THE PROJECT

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by separate contractors.

§ 1.1.5 THE DRAWINGS

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

§ 1.1.6 THE SPECIFICATIONS

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 INSTRUMENTS OF SERVICE

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.8 INITIAL DECISION MAKER

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2 and certify termination of the Agreement under Section 14.2.2.

§ 1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.3 CAPITALIZATION

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 INTERPRETATION

In the interest of brevity the Contract Documents frequently omit modifying words such as “all” and “any” and articles such as “the” and “an,” but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE

§ 1.5.1 The Architect and the Architect’s consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and will retain all common law, statutory and other reserved rights, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Architect’s or Architect’s consultants’ reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors and material or equipment suppliers are authorized to use and reproduce the Instruments of Service provided to them solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers may not use the Instruments of Service on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner, Architect and the Architect’s consultants.

§ 1.6 TRANSMISSION OF DATA IN DIGITAL FORM

If the parties intend to transmit Instruments of Service or any other information or documentation in digital form, they shall endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Agreement or the Contract Documents.

ARTICLE 2 OWNER

§ 2.1 GENERAL

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner’s approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term “Owner” means the Owner or the Owner’s authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of or enforce mechanic’s lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner’s interest therein.

§ 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

§ 2.2.1 Prior to commencement of the Work, the Contractor may request in writing that the Owner provide reasonable evidence that the Owner has made financial arrangements to fulfill the Owner’s obligations under the Contract. Thereafter, the Contractor may only request such evidence if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) a change in the Work materially changes the Contract Sum; or (3) the Contractor identifies in writing a reasonable concern regarding the Owner’s ability to make payment when due. The Owner shall furnish such evidence as a condition precedent to commencement or continuation of the Work or the portion of the Work affected by a material change. After the Owner furnishes the evidence, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.2 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

§ 2.2.3 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.2.4 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.2.5 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.3 OWNER'S RIGHT TO STOP THE WORK

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

§ 2.4 OWNER'S RIGHT TO CARRY OUT THE WORK

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect or failure. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

ARTICLE 3 CONTRACTOR

§ 3.1 GENERAL

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.2.3, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These

obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall make Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner and Architect and shall not proceed with that portion of the Work without further written instructions from the Architect. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any loss or damage arising solely from those Owner-required means, methods, techniques, sequences or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.4 LABOR AND MATERIALS

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work authorized by the Architect in accordance with Sections 3.12.8 or 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.5 WARRANTY

The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.6 TAXES

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 PERMITS, FEES, NOTICES AND COMPLIANCE WITH LAWS

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions. If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor in writing, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may proceed as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 ALLOWANCES

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents,

- .1 Allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;

- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 Whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

§ 3.9 SUPERINTENDENT

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the name and qualifications of a proposed superintendent. The Architect may reply within 14 days to the Contractor in writing stating (1) whether the Owner or the Architect has reasonable objection to the proposed superintendent or (2) that the Architect requires additional time to review. Failure of the Architect to reply within the 14 day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

§ 3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

§ 3.10.2 The Contractor shall prepare a submittal schedule, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, and shall submit the schedule(s) for the Architect's approval. The Architect's approval shall not unreasonably be delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect.

§ 3.11 DOCUMENTS AND SAMPLES AT THE SITE

The Contractor shall maintain at the site for the Owner one copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and one copy of approved Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the Architect and shall be delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Their purpose is to demonstrate the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve and submit to the Architect Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Architect.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Architect on previous submittals. In the absence of such written notice, the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. The Contractor shall not be required to provide professional services in violation of applicable law. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor all performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review, approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance and design criteria specified in the Contract Documents.

§ 3.13 USE OF SITE

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.14 CUTTING AND PATCHING

§ 3.14.1 The Contractor shall be responsible for cutting, fitting or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting and patching shall be restored to the condition existing prior to the cutting, fitting and patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or separate contractors by cutting, patching or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.

§ 3.15 CLEANING UP

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 ACCESS TO WORK

The Contractor shall provide the Owner and Architect access to the Work in preparation and progress wherever located.

§ 3.17 ROYALTIES, PATENTS AND COPYRIGHTS

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner or Architect. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Architect.

§ 3.18 INDEMNIFICATION

§ 3.18.1 To the fullest extent permitted by law the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

ARTICLE 4 ARCHITECT

§ 4.1 GENERAL

§ 4.1.1 The Owner shall retain an architect lawfully licensed to practice architecture or an entity lawfully practicing architecture in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 4.1.2 Duties, responsibilities and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified or extended without written consent of the Owner, Contractor and Architect. Consent shall not be unreasonably withheld.

§ 4.1.3 If the employment of the Architect is terminated, the Owner shall employ a successor architect as to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

§ 4.2 ADMINISTRATION OF THE CONTRACT

§ 4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect issues the final Certificate for Payment. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, except as provided in Section 3.3.1.

§ 4.2.3 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and report to the Owner (1) known deviations from the Contract Documents and from the most recent construction schedule submitted by the Contractor, and (2) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of and will not be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 4.2.4 COMMUNICATIONS FACILITATING CONTRACT ADMINISTRATION

Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other through the Architect about matters arising out of or relating to the Contract. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner.

§ 4.2.5 Based on the Architect's evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 4.2.6 The Architect has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.5.2 and 13.5.3, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5 and 3.12. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of any construction means, methods,

techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.8 The Architect will prepare Change Orders and Construction Change Directives, and may authorize minor changes in the Work as provided in Section 7.4. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.9 The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.

§ 4.2.10 If the Owner and Architect agree, the Architect will provide one or more project representatives to assist in carrying out the Architect's responsibilities at the site. The duties, responsibilities and limitations of authority of such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.

§ 4.2.11 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.12 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either and will not be liable for results of interpretations or decisions rendered in good faith.

§ 4.2.13 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.14 The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 DEFINITIONS

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

§ 5.2.1 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Architect may reply within 14 days to the Contractor in writing stating (1) whether the Owner or the Architect has reasonable objection to any such proposed person or entity or (2) that the Architect requires additional time for review. Failure of the Owner or Architect to reply within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person or entity previously selected if the Owner or Architect makes reasonable objection to such substitution.

§ 5.3 SUBCONTRACTUAL RELATIONS

By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor in writing; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon such assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

§ 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Article 15.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to the construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors and the Owner until subsequently revised.

§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same obligations and to have the same rights that apply to the Contractor under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6 and Articles 10, 11 and 12.

§ 6.2 MUTUAL RESPONSIBILITY

§ 6.2.1 The Contractor shall afford the Owner and separate contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Architect apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acknowledgment that the Owner's or separate contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a separate contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a separate contractor's delays, improperly timed activities, damage to the Work or defective construction.

§ 6.2.4 The Contractor shall promptly remedy damage the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or separate contractors as provided in Section 10.2.5.

§ 6.2.5 The Owner and each separate contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.3 OWNER'S RIGHT TO CLEAN UP

If a dispute arises among the Contractor, separate contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Architect will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 GENERAL

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Contractor and Architect; a Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor; an order for a minor change in the Work may be issued by the Architect alone.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or order for a minor change in the Work.

§ 7.2 CHANGE ORDERS

§ 7.2.1 A Change Order is a written instrument prepared by the Architect and signed by the Owner, Contractor and Architect stating their agreement upon all of the following:

- .1** The change in the Work;
- .2** The amount of the adjustment, if any, in the Contract Sum; and
- .3** The extent of the adjustment, if any, in the Contract Time.

§ 7.3 CONSTRUCTION CHANGE DIRECTIVES

§ 7.3.1 A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.7.

§ 7.3.4 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed in a proposed Change Order or Construction Change Directive so that application of such unit prices to quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 7.3.5 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.6 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.7 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the method and the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.7 shall be limited to the following:

- .1 Costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers' compensation insurance;
- .2 Costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and
- .5 Additional costs of supervision and field office personnel directly attributable to the change.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Architect determines, in the Architect's professional judgment, to be

reasonably justified. The Architect's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Architect will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 MINOR CHANGES IN THE WORK

The Architect has authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes will be effected by written order signed by the Architect and shall be binding on the Owner and Contractor.

ARTICLE 8 TIME

§ 8.1 DEFINITIONS

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 PROGRESS AND COMPLETION

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor and Owner. The date of commencement of the Work shall not be changed by the effective date of such insurance.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 DELAYS AND EXTENSIONS OF TIME

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or Architect, or of an employee of either, or of a separate contractor employed by the Owner; or by changes ordered in the Work; or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control; or by delay authorized by the Owner pending mediation and arbitration; or by other causes that the Architect determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 CONTRACT SUM

The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.2 SCHEDULE OF VALUES

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit to the Architect, before the first Application for Payment, a schedule of values allocating the entire Contract Sum to the various portions of the Work and prepared in such form and supported by such data to substantiate its accuracy as

the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 9.3 APPLICATIONS FOR PAYMENT

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. Such application shall be notarized, if required, and supported by such data substantiating the Contractor's right to payment as the Owner or Architect may require, such as copies of requisitions from Subcontractors and material suppliers, and shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Architect, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or material supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage and transportation to the site for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

§ 9.4 CERTIFICATES FOR PAYMENT

§ 9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either issue to the Owner a Certificate for Payment, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Section 9.5.1.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data comprising the Application for Payment, that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated and that the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion and to specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to substantiate the Contractor's right to payment, or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 DECISIONS TO WITHHOLD CERTIFICATION

§ 9.5.1 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to

make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a separate contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.3 If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or material or equipment suppliers to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Architect will reflect such payment on the next Certificate for Payment.

§ 9.6 PROGRESS PAYMENTS

§ 9.6.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Architect.

§ 9.6.2 The Contractor shall pay each Subcontractor no later than seven days after receipt of payment from the Owner the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and material and equipment suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay or to see to the payment of money to a Subcontractor, except as may otherwise be required by law.

§ 9.6.5 Contractor payments to material and equipment suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors and suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, shall create any fiduciary liability or tort liability on the part of the Contractor for breach of trust or shall entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.7 FAILURE OF PAYMENT

If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents the amount certified by the Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' written notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 SUBSTANTIAL COMPLETION

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the Contractor's list, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate. Upon such acceptance and consent of surety, if any, the Owner shall make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.9 PARTIAL OCCUPANCY OR USE

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Section 11.3.1.5 and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Contractor and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 FINAL COMPLETION AND FINAL PAYMENT

§ 9.10.1 Upon receipt of the Contractor's written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection and, when the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents; or
- .3 terms of special warranties required by the Contract Documents.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 SAFETY PRECAUTIONS AND PROGRAMS

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract.

§ 10.2 SAFETY OF PERSONS AND PROPERTY

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

§ 10.2.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

§ 10.2.3 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3, except damage or loss attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.1.8.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 INJURY OR DAMAGE TO PERSON OR PROPERTY

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 HAZARDOUS MATERIALS

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner and Architect in writing.

§ 10.3.2 Upon receipt of the Contractor's written notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. The Contractor and the Architect will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor's reasonable additional costs of shut-down, delay and start-up.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from

performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall indemnify the Owner for the cost and expense the Owner incurs (1) for remediation of a material or substance the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall indemnify the Contractor for all cost and expense thereby incurred.

§ 10.4 EMERGENCIES

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 CONTRACTOR'S LIABILITY INSURANCE

§ 11.1.1 The Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations and completed operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- .1 Claims under workers' compensation, disability benefit and other similar employee benefit acts that are applicable to the Work to be performed;
- .2 Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
- .3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
- .4 Claims for damages insured by usual personal injury liability coverage;
- .5 Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- .6 Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle;
- .7 Claims for bodily injury or property damage arising out of completed operations; and
- .8 Claims involving contractual liability insurance applicable to the Contractor's obligations under Section 3.18.

§ 11.1.2 The insurance required by Section 11.1.1 shall be written for not less than limits of liability specified in the Contract Documents or required by law, whichever coverage is greater. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from the date of commencement of the Work until the date of final payment and termination of any coverage required to be maintained after final payment, and, with respect to the Contractor's completed operations coverage, until the expiration of the period for correction of Work or for such other period for maintenance of completed operations coverage as specified in the Contract Documents.

§ 11.1.3 Certificates of insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work and thereafter upon renewal or replacement of each required policy of insurance. These certificates and the insurance policies required by this Section 11.1 shall contain a provision that coverages 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 Owner. An

additional certificate evidencing continuation of liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment as required by Section 9.10.2 and thereafter upon renewal or replacement of such coverage until the expiration of the time required by Section 11.1.2. Information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the Contractor with reasonable promptness.

§ 11.1.4 The Contractor shall cause the commercial liability coverage required by the Contract Documents to include (1) the Owner, the Architect and the Architect's consultants as additional insureds for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations.

§ 11.2 OWNER'S LIABILITY INSURANCE

The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance.

§ 11.3 PROPERTY INSURANCE

§ 11.3.1 Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk "all-risk" or equivalent policy form in the amount of the initial Contract Sum, plus value of subsequent Contract Modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section 11.3 to be covered, whichever is later. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Project.

§ 11.3.1.1 Property insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss.

§ 11.3.1.2 If the Owner does not intend to purchase such property insurance required by the Contract and with all of the coverages in the amount described above, the Owner shall so inform the Contractor in writing prior to commencement of the Work. The Contractor may then effect insurance that will protect the interests of the Contractor, Subcontractors and Sub-subcontractors in the Work, and by appropriate Change Order the cost thereof shall be charged to the Owner. If the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above, without so notifying the Contractor in writing, then the Owner shall bear all reasonable costs properly attributable thereto.

§ 11.3.1.3 If the property insurance requires deductibles, the Owner shall pay costs not covered because of such deductibles.

§ 11.3.1.4 This property insurance shall cover portions of the Work stored off the site, and also portions of the Work in transit.

§ 11.3.1.5 Partial occupancy or use in accordance with Section 9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

§ 11.3.2 BOILER AND MACHINERY INSURANCE

The Owner shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Contractor, Subcontractors and Sub-subcontractors in the Work, and the Owner and Contractor shall be named insureds.

§ 11.3.3 LOSS OF USE INSURANCE

The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused. The Owner waives all rights of action against the Contractor for loss of use of the Owner's property, including consequential losses due to fire or other hazards however caused.

§ 11.3.4 If the Contractor requests in writing that insurance for risks other than those described herein or other special causes of loss be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the Contractor by appropriate Change Order.

§ 11.3.5 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, the Owner shall waive all rights in accordance with the terms of Section 11.3.7 for damages caused by fire or other causes of loss covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.

§ 11.3.6 Before an exposure to loss may occur, the Owner shall file with the Contractor a copy of each policy that includes insurance coverages required by this Section 11.3. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire, and that its limits will not be reduced, until at least 30 days' prior written notice has been given to the Contractor.

§ 11.3.7 WAIVERS OF SUBROGATION

The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents and employees, each of the other, and (2) the Architect, Architect's consultants, separate contractors described in Article 6, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to this Section 11.3 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner as fiduciary. The Owner or Contractor, as appropriate, shall require of the Architect, Architect's consultants, separate contractors described in Article 6, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

§ 11.3.8 A loss insured under the Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.3.10. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner.

§ 11.3.9 If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach, or as determined in accordance with the method of binding dispute resolution selected in the Agreement between the Owner and Contractor. If after such loss no other special agreement is made and unless the Owner terminates the Contract for convenience, replacement of damaged property shall be performed by the Contractor after notification of a Change in the Work in accordance with Article 7.

§ 11.3.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five days after occurrence of loss to the Owner's exercise of this power; if such objection is made, the dispute shall be resolved in the manner selected by the Owner and Contractor as the method of binding dispute resolution in the Agreement. If the Owner and Contractor have selected arbitration as the method of binding dispute resolution, the Owner as fiduciary shall make settlement with insurers or, in the case of a dispute over distribution of insurance proceeds, in accordance with the directions of the arbitrators.

§ 11.4 PERFORMANCE BOND AND PAYMENT BOND

§ 11.4.1 The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

§ 11.4.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 UNCOVERING OF WORK

§ 12.1.1 If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. If such Work is not in accordance with the Contract Documents, such costs and the cost of correction shall be at the Contractor's expense unless the condition was caused by the Owner or a separate contractor in which event the Owner shall be responsible for payment of such costs.

§ 12.2 CORRECTION OF WORK

§ 12.2.1 BEFORE OR AFTER SUBSTANTIAL COMPLETION

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 AFTER SUBSTANTIAL COMPLETION

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.4.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct

the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.3 ACCEPTANCE OF NONCONFORMING WORK

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 GOVERNING LAW

The Contract shall be governed by the law of the place where the Project is located except that, if the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

§ 13.2 SUCCESSORS AND ASSIGNS

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to covenants, agreements and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate such assignment.

§ 13.3 WRITTEN NOTICE

Written notice shall be deemed to have been duly served if delivered in person to the individual, to a member of the firm or entity, or to an officer of the corporation for which it was intended; or if delivered at, or sent by registered or certified mail or by courier service providing proof of delivery to, the last business address known to the party giving notice.

§ 13.4 RIGHTS AND REMEDIES

§ 13.4.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

§ 13.4.2 No action or failure to act by the Owner, Architect or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach there under, except as may be specifically agreed in writing.

§ 13.5 TESTS AND INSPECTIONS

§ 13.5.1 Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear costs of (1) tests, inspections or approvals that do not become requirements until after bids are received or negotiations concluded, and (2) tests, inspections or approvals where building codes or applicable laws or regulations prohibit the Owner from delegating their cost to the Contractor.

§ 13.5.2 If the Architect, Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Section 13.5.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.5.3, shall be at the Owner's expense.

§ 13.5.3 If such procedures for testing, inspection or approval under Sections 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure including those of repeated procedures and compensation for the Architect's services and expenses shall be at the Contractor's expense.

§ 13.5.4 Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

§ 13.5.5 If the Architect is to observe tests, inspections or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.5.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.6 INTEREST

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at such rate as the parties may agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

§ 13.7 TIME LIMITS ON CLAIMS

The Owner and Contractor shall commence all claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other arising out of or related to the Contract in accordance with the requirements of the final dispute resolution method selected in the Agreement within the time period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all claims and causes of action not commenced in accordance with this Section 13.7.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 TERMINATION BY THE CONTRACTOR

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons:

- .1** Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2** An act of government, such as a declaration of national emergency that requires all Work to be stopped;
- .3** Because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4** The Owner has failed to furnish to the Contractor promptly, upon the Contractor's request, reasonable evidence as required by Section 2.2.1.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, repeated suspensions, delays or interruptions of the entire Work by the Owner as described in Section 14.3 constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' written notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed, including reasonable overhead and profit, costs incurred by reason of such termination, and damages.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' written notice to the Owner and the Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 TERMINATION BY THE OWNER FOR CAUSE

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the above reasons exist, the Owner, upon certification by the Initial Decision Maker that sufficient cause exists to justify such action, may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Initial Decision Maker, upon application, and this obligation for payment shall survive termination of the Contract.

§ 14.3 SUSPENSION BY THE OWNER FOR CONVENIENCE

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

- .1 that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.4 TERMINATION BY THE OWNER FOR CONVENIENCE

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 CLAIMS

§ 15.1.1 DEFINITION

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim.

§ 15.1.2 NOTICE OF CLAIMS

Claims by either the Owner or Contractor must be initiated by written notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party must be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3 CONTINUING CONTRACT PERFORMANCE

Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents. The Architect will prepare Change Orders and issue Certificates for Payment in accordance with the decisions of the Initial Decision Maker.

§ 15.1.4 CLAIMS FOR ADDITIONAL COST

If the Contractor wishes to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.5 CLAIMS FOR ADDITIONAL TIME

§ 15.1.5.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.5.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction.

§ 15.1.6 CLAIMS FOR CONSEQUENTIAL DAMAGES

The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.6 shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 INITIAL DECISION

§ 15.2.1 Claims, excluding those arising under Sections 10.3, 10.4, 11.3.9, and 11.3.10, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim arising prior to the date final payment is due, unless 30 days have passed after the Claim has been referred to the Initial Decision Maker with no decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise,

or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of such request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

§ 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

§ 15.2.6.1 Either party may, within 30 days from the date of an initial decision, demand in writing that the other party file for mediation within 60 days of the initial decision. If such a demand is made and the party receiving the demand fails to file for mediation within the time required, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 MEDIATION

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.6 shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 15.3.3 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 ARBITRATION

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually

agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 15.4.4 CONSOLIDATION OR JOINDER

§ 15.4.4.1 Either party, at its sole discretion, may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 15.4.4.2 Either party, at its sole discretion, may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as the Owner and Contractor under this Agreement.

END SECTION AIA A201

12.1 – Addendum To General Conditions – AIA Document A201

GENERAL CONDITIONS

- A. Standard Form: The General Conditions of the Contract forming a part of the Contract Documents and of these Specifications, consists of AIA Document A201, 2007 Edition.
- B. Modifications and Additions: Where Contract Documents refer to General Conditions, such reference shall be interpreted to include Addendum to General Conditions.
- C. Where contract documents refer to “architect”, such reference shall be interpreted to be “engineer”.

CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

- A. If conflicts or discrepancies occur in the Contract Documents, interpretations will be based on the following priorities:
 - 1. Awarding Authority-Contractor Agreement.
 - 2. Addenda, with those of later date having precedence over those of earlier date.
 - 3. The Supplementary Conditions.
 - 4. The General Conditions of the Contract for Construction.
 - 5. Drawings and Specifications.
- B. For an inconsistency between Drawings and Specifications or within either Document not clarified by Addendum, the better quality or greater quantity of work shall be provided according to the Architect's interpretation.

ARTICLE 2 - OWNER

Sub-paragraph 2.1.2- delete in its entirety

ARTICLE 7 – CHANGES IN THE WORK

Sub-paragraph 7.3.4- delete in its entirety

ARTICLE 11 – INSURANCE AND BONDS

Sub-paragraph 11.3- delete in its entirety.

13 – Supplementary Conditions

100.0 CLAIMS FOR EXTRA COST

100.1 If the Contractor claims that any instructions by Drawings or otherwise involve extra cost or extension of time, they shall, within ten (10) days after the receipt of such instructions, and in any event before proceeding to execute the work, submit their protest thereto in writing to the Owner stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.

100.2 Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, site location, or bench marks, will not be recognized unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material or performing more work than would be reasonably estimated from the Drawings and map issued.

100.3 Any discrepancies which may be discovered between actual conditions and those represented by the Drawings and maps shall at once be reported to the Owner and work shall not proceed except at the Contractor's risk, until written instructions have been received by them from the Owner.

100.4 If, on the basis of the available evidence, the Owner determines that an adjustment of the Contract Price and/or Time is justifiable, the procedure shall be as provided in Section 110 hereof.

101.0 TERMINATION, DELAYS, AND LIQUIDATED DAMAGES

101.1 Termination of Contract. If the Contractor refuses or fails to prosecute the work with such diligence as will insure its completion within the time specified in these Contract Documents, or as modified as provided in these Contract Documents, the Owner by written notice to the Contractor, may terminate the Contractor's right to proceed with the work. Upon such termination, the Owner may take over the work and prosecute the same to completion of the work and the Contractor shall also be liable to the Owner in its completion of the work and the Contractor shall also be liable to the Owner for liquidated damages for any delay in the completion of the work as provided below. If the Contractor's right to proceed is so terminated, the Owner may take possession of and utilize in completing the work, such materials, tools, equipment, and plant as may be on the site of the work and necessary therefore.

101.2 Liquidated Damages for Delays. If the work be not completed within the time stipulated in Section 402 hereof, including any extensions of time for excusable delays as herein provided, the Contractor shall pay to the Owner as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) for each calendar day of delay, until the work is completed, the amount as set forth in Section 403 hereof and the Contractor and his sureties shall be liable to the Owner for the amount thereof.

101.3 Excusable Delays. The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due.

101.3.1 To any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, National Defense, or any other national emergency.

101.3.2 To any acts of the Owner.

101.3.3 To causes not reasonably foreseeable by the parties to this Contract at the time of the execution of the Contract which are 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 another Contractor in the performance of some other contract with the Owner, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricane, tornadoes, cyclones and other extreme weather conditions; and

101.3.4 To any delay of any subcontractor occasioned by any of the causes specified in subparagraphs 1, 2 and 3 of this paragraph 101.3.

Provided, however, that the Contractor promptly notify the Owner within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, the Owner shall ascertain the facts and the cause and extent of delay. If, upon the basis of the facts and the terms of this contract, the delay is properly excusable, the Owner shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

102.0 SAMPLES, CERTIFICATES AND TESTS

102.1 The Contractor shall submit all material or equipment samples, certificates, affidavits, etc. as called for in the contract documents or required by the Owner promptly after award of the Contract and acceptance of the Contractor's bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the Owner. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the contract time.

Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the property for which it is intended, and the name of the producer. The accompanying certificate or letter from the Contractor shall state that the sample complies with contract requirements, shall give the name and brand of the products, its place or origin, the name and address of the producer and all specifications or other detailed information which will assist the Owner in passing upon the acceptability of the sample promptly. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements.

102.2 Approval of any materials shall be general only and shall not constitute a waiver of the Owner's right to demand full compliance with Contract requirements. After actual deliveries, the Owner will have such check tests made as they deem necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment or accessories, which fail to meet check tests have been incorporated in the work, the Owner will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable.

102.3 Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:

102.3.1 The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes except those samples taken on the project by the Owner;

102.3.2. The Contractor shall assume all costs of re-testing materials which fail to meet contract requirements;

102.3.3 The Contractor shall assure all cost of testing materials offered in substitution of those found deficient; and

102.3.4 The Owner will pay all other expenses.

103.0 PERMITS AND CODES

103.1 The Contractor shall give all notices required by and comply with all applicable laws, ordinances, and codes of the Local Government. All construction work and/or utility installations shall comply with all applicable ordinances, and codes including all written waivers. Before installing any work, the Contractor shall examine the Drawings and Technical Specifications for compliance with applicable ordinances and codes and shall immediately report any discrepancy to the Owner. Where the requirements of the Drawings and Technical Specifications fail to comply with such applicable ordinances or codes, the

Owner will adjust the Contract by Change Order to conform to such ordinances or codes (unless waivers in writing covering the difference have been granted by the governing body or department) and make appropriate adjustment in the Contract Price or stipulated unit prices.

Should the Contractor fail to observe the foregoing provisions and proceed with the construction and/or install any utility at the variance with any applicable ordinance or code, including any written waivers (notwithstanding the fact that such installation is in compliance with the Drawings and Technical Specifications), the Contractor shall remove such work without cost to the Owner, but a Change Order will be issued to cover only the excess cost the Contractor would have been entitled to receive if the Change had been made before the Contractor commenced work on the items involved.

103.2 The Contractor shall at their own expense, secure and pay to the appropriate department of the Local Government the fees or charges for all permits for street pavement, sidewalks, sheds, removal of abandoned water taps, sealing of house connection drains, pavement cuts, buildings, electrical, plumbing, water, gas and sewer permits required by the local regulatory body or any of its agencies.

103.3 The Contractor shall comply with applicable local laws and ordinances governing excavations and the disposal of surplus excavation, materials, debris and rubbish on or off the Project Area and commit no trespass on any public or private property in any operation due to or connected with the Improvements embraced in this Contract.

104.0 CARE OF WORK

104.1 The Contractor shall be responsible for all damages to person or property that occur as a result of their fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the Owner.

104.2 The Contractor shall provide, where necessary and as requested by the Owner, sufficient competent watchmen, both day and night, including Saturdays, Sundays, and holidays, from the time the work is commenced until final completion and acceptance.

104.3 In an emergency affecting and safety of life, limb or property, including adjoining property, the Contractor without special instructions or authorization from the Owner is authorized to act at their discretion to prevent such threatened loss or injury, and they shall so act. They shall likewise act if instructed to do so by the Owner. Any compensation claimed by the Contractor on account of such emergency work will be determined by the Owner as provided in Section 110 hereof.

104.4 The Contractor shall avoid damage as a result of their operations to existing sidewalks, streets, curbs, pavements, utilities, (except those which are to be replaced or removed), adjoining property, etc., and they shall at their own expense completely repair any damage thereto caused by their operations.

104.5 The Contractor shall shore up, brace, underpin, secure, and protect as may be necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the Improvements embraced in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property Owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the Owner from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the Owner may become liable in consequence of such injury of damage to adjoining and adjacent structures and their premises.

105.0 ACCIDENT PREVENTION

105.1 The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work. The safety provisions of applicable laws and building and construction codes shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as the Owner may determine to be reasonably necessary. Machinery, equipment and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident prevention in Construction" published by the Associates General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws.

105.2 The Contractor shall maintain an accurate record of all cases of death, occupational disease, or injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor shall promptly furnish the Owner with reports concerning these matters.

105.3 The Contractor shall indemnify and save harmless the Owner from any claims for damages resulting from property damage, personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this Contract.

106.0 USE OF PREMISES

106.1 The Contractor shall confine their equipment, storage of materials and construction operations to the Contract limits as shown on the Drawings and as prescribed by ordinances or permits, or as may be desired by the Owner and shall not unreasonably encumber the site or public rights of way with his materials and construction equipment.

106.2 The Contractor shall comply with all reasonable instructions of the Owner and the ordinances and codes of the Local Government, regarding signs, advertising, traffic, fires, explosives, danger signals, barricades and fire prevention.

107.0 REMOVAL OF DEBRIS, CLEANING, ETC.

The Contractor shall, periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights of way reasonably clear. Upon completion of the work, the Contractor shall remove all temporary construction facilities, debris and unused materials provided for the work, and put the work site of the work and public rights of way in a neat and clean condition. Trash burning

on the site of the work will be subject to prior approval of the Owner and existing State and Local regulations.

108.0 INSPECTION

108.1 All materials and workmanship shall be subject to inspection, examination, or test by the Owner and the Engineer at any and all times during manufacture of construction and at any and all places where such manufacture or construction is carried on. The Owner shall have the right to reject defective material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected. Rejected material shall be promptly segregated and removed from the Project Area and replaced with material of specified quality without charge therefore. If the Contractor fails to proceed at once with correction of rejected workmanship or defective material, the Owner may by Contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any monies which may be due the Contractor, without prejudice to any other rights or remedies of the Owner.

108.2 The Contractor shall furnish promptly all materials reasonably necessary for any tests, which may be required. (See Section 102 hereof). All tests by the Owner will be performed in such manner as not to delay the work unnecessarily and will be made in accordance with the provisions of the Technical Specifications.

108.3 The Contractor shall notify the Owner sufficiently in advance of backfilling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent of the Owner, the Contractor shall uncover for inspection and recover such facilities all at their own expense, when so requested by the Owner.

Should it be considered necessary or advisable by the Owner at any time before final acceptance of the entire work to make an examination of work already completed by uncovering the same, the Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the Contractor or their subcontractors, the Contractor shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, plus 15 percent of such costs to cover superintendence, general expenses and profit, shall be allowed by the Contractor and they shall, in addition, if completion of the work of the entire Contract has been delayed thereby, be granted a suitable extension of time on account of the additional work involved.

108.4 Inspection of materials and appurtenances to be incorporated in the Improvements embraced in this Contract may be made at the place of production, manufacture or shipment, whatever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the Technical Specifications, shall be final, except as regards (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the Project Site.

108.5 Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the Owner or its agents shall relieve the Contractor of their sureties of full responsibility for materials furnished or work performed not in strict accordance with the Contract.

109.0 REVIEW BY THE OWNER

The Owner, its authorized representatives and agents and the Representative for the Secretary (as defined under GENERAL CONDITIONS, PART II) shall, at all times, have access to, and be permitted to observe and review all work, materials, equipment, payrolls, personnel records,

employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however, that all instructions and approval with respect to the work will be given to the Contractor only by the Owner through its authorized representatives or agents.

110.0 FINAL INSPECTION

110.1 When the Improvements embraced in this Contract are substantially completed, the Contractor shall notify the Owner in writing that the work will be ready for final inspection on a definite date, which shall be stated in the notice. The notice will be given at least ten (10) days prior to the date stated for final inspection, and bear the signed concurrence of the representative of the Owner having charge of inspection. If the Owner determines that the status of the Improvements is as represented, it will make the arrangements necessary to have final inspection commenced on the date stated in the notice, or as soon thereafter as is practicable. The inspection party will include representatives of each department of the Local Government having in charge Improvements of like character when such Improvements are later to be accepted by the Local Government.

111.0 DEDUCTION FOR UNCORRECTED WORK

If the Owner deems it not expedient to require the Contractor to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the Contractor and the Owner and subject to settlement, in case of dispute, as herein provided.

112.0 INSURANCE

See Section 5.0 Insurance for information.

113.0 PATENTS

The Contractor shall hold and save the Owner its officers, and employees, harmless from liability of any nature of kind, including costs 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 unless otherwise specifically stipulated in the Technical Specifications.

114.0 WARRANTY OF TITLE

No material, supplies, or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditioned sale, lease-purchase or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by them to the Owner free from any claims, liens, or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance thereon. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The provisions of this paragraph shall be inserted in all subcontracts and materials contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal Contract is entered into for such materials.

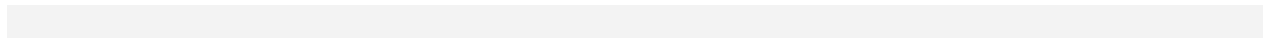
115.0 GENERAL GUARANTY

Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of the Improvements embraced in this Contract by the Owner or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of twelve (12) months from the date of final acceptance of the work. The Owner will give notice of defective materials and work with reasonable promptness.

116.0 CONTRACTOR TO MAKE OWN EXAMINATION

Plans, calculations, estimates of quantities, and any statements made in the Instructions to Bidders or otherwise as to the conditions under which the work is to be performed are not guaranteed by the Owner to be correct or to be a complete representation of all existing data on conditions affecting work, and the Contractor agrees that they have made their examination and will make no claim for damages on account of any errors, inaccuracies or omissions that may be found.

The Contractor shall not take any advantage or have any claim for damages on account of any discrepancy, error or omission in any plans, calculations, estimates of quantities, or any statement made in the Instructions to Bidders or otherwise as to the conditions under which the work is to be performed, and they shall report such discrepancy, error or omission to the Owner in writing as soon as it comes to their knowledge, and before proceeding with work related to such discrepancy, error or omission. Any correction or modification of the plans or specifications may be made by the Owner when necessary, in their opinion, for the proper fulfillment of their purpose or for their proper interpretation.



14 – Special Conditions

SPECIAL CONDITIONS FOR

PROSPECT HEIGHTS SEWER RECONSTRUCTION

402.0 TIME FOR COMPLETION

The work which the Contractor is required to perform under this Contract shall be commenced at the time stipulated by the Owner in the Notice to Proceed to the Contractor.

The rate of progress shall be such that the whole work shall be performed in accordance with the terms of this contract within the number of calendar days after the date of execution of the contract as herein stipulated, unless the expected as any part may be delayed under the provisions of this contract. The work shall be pursued in a continuous, diligent, and uniform manner throughout the project until completion.

It is agreed that the rates of progress herein required has been purposely made low enough to allow for the ordinary delays incident to construction work of this character. No extension of time will be made for ordinary delays, inclement weather and accidents, and the occurrence of such will not relieve the Contractor from the necessity of maintaining this rate of progress.

If delays are caused by acts of God, acts of Government or State, strikes extra work, floods or other contingencies clearly beyond the control or responsibility of the Contractor, the Contractor shall be entitled to so much additional time wherein to perform and complete this contract on his part as the Engineer shall certify in writing to be just.

403.0 LIQUIDATED DAMAGES

In case the Contractor fails satisfactorily to complete the entire work contemplated and provided for under this contract on or before the date of completion determined as described above, the Owner shall deduct from the payments due to the Contractor each month the sum of \$1,200.00 for each calendar day (Sundays and legal holidays excluded) of delay, which sum is agreed upon not as a penalty, but as fixed and liquidated damages, said damages shall be deducted from any other moneys due or to become due the Contractor, and in case such damages exceed the amount of all moneys due or to become due, the Contractor then the Contractor or his Surety shall pay the balance to the Owner.

404.0 RESPONSIBILITIES OF CONTRACTOR

404.1 Except as otherwise specifically stated in the Contract Documents, and Technical Specifications, the Contract shall provide and pay for all materials, tools, labor, equipment, water, light, heat, power, transportation, superintendence, temporary construction of every nature, charges, levies, fee or other expenses, and all other services and facilities of every nature whatsoever necessary for the performance of the Contract and to deliver all improvements embraced in this Contract complete in every respect within the specified time.

404.2 All materials, workmanship, methods and practices shall conform to the current Standards of the American Water Works Association, the Rhode Island Standard Specifications for Road and Bridge Construction, 2018 edition, including all corrections, all issued compilation of approved specifications, and addendum to date and all general requirements and special requirements

contained in this project specifications. All work zone traffic control shall be in accordance with the Manual on Uniform Traffic Control Devices, 2009 edition.

404.3 The Contractor shall be responsible for detailed layout, all stakeout and grade control, and shall employ a registered engineer or a registered land surveyor for this purpose as may be necessary. The Owner will provide engineering and inspection.

404.4 The Contractor shall verify dimensions shown on the plans and if any inconsistencies or discrepancies should be noted on the Drawings and the Specifications, he/she shall immediately notify the Owner. The Contractor will be held responsible for any errors resulting from his/her failure to exercise the aforementioned precaution.

404.5 As soon as the Contract is executed, the Contractor shall order any materials necessary and not supplied by the Owner, submit construction schedules as hereinafter specified, and otherwise anticipate the Notice to Proceed. When the Owner gives the Notice to Proceed, the work of construction shall begin at the time stipulated therein and shall be completed within the Time for Completion specified.

404.6 It is the Contractor's responsibility to make his/her own investigation and related assumptions and to satisfy himself as to subsurface conditions and to insure that these are reflected in the prices bid. No change or extra to the price will be accepted due to subsurface conditions or utility locations.

The determination of location and subsequent maintenance and protection of existing subsurface and above ground utilities are the sole responsibility of the Contractor; claims resulting from damage to such by the Contractor will be settled by the Contractor at his/her expense in accordance with the Contract.

404.7 The Contractor shall, at his/her own expense, take out all necessary permits from the county, municipal, or other public authorities; shall give all notices required by law or ordinances; and shall post all bonds and pay all fees and charges incident to the due and lawful prosecution of the work covered by this Contract.

404.8 RESPONSIBILITY FOR MATERIAL FURNISHED BY OWNER: The Contractor's responsibility for material furnished by the Owner shall begin upon Contractor's acceptance at the point of delivery to him. All such material shall be examined, and material defective in manufacture and/or otherwise damaged shall be rejected by the Contractor at the time and place of delivery to him and replaced by the Owner. Material furnished by the Owner which is accepted by the Contractor, but is discovered prior to final acceptance of the work, (1) to be defective in manufacture, shall be replaced by the Owner; (2) to have been damaged before or after acceptance by the Contractor, shall be replaced by the Contractor. Once accepted by the Contractor at the point of delivery to him, all defective and/or damaged material discovered prior to final acceptance of the work shall be removed by the Contractor and he shall install, at his own expense, the material replaced, in its stead, by the Owner or Contractor. In such case, the Contractor shall furnish all labor, equipment, and material incidental to replacement and necessary for the completion of the work to the satisfaction of the Engineer.

404.9 RESPONSIBILITY FOR SAFE STORAGE: The Contractor shall be responsible for the safe storage of all material furnished to or by him and accepted by him until it has been incorporated in the completed project.

405.0 COMMUNICATIONS

405.1 All notices, demands, requests, instructions, approvals, proposals and claims must be in writing.

405.2 Any notice to or demand upon the Contractor shall be sufficiently given if delivered at the office of the Contractor stated on the signature page of the Agreement (or at such other offices as the Contractor may from time to time designate in writing to the Owner), or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for translation, in each case addressed to such office.

405.3 All papers; required to be delivered to the Owner shall, unless otherwise specified in writing to the Contractor, be delivered to the CITY OF PAWTUCKET, DEPARTMENT OF PUBLIC WORKS, 250 Armistice Boulevard, Pawtucket, Rhode Island, 02860; any notice to or demands upon the Owner shall be sufficiently given if so delivered, or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission to said Owner at such address, or to such other representative of the Owner or to such other address, as the Owner may subsequently specify in writing to the Contractor for such purpose.

405.4 Any such notice shall be deemed to have been given as of the time of actual delivery or (in the case of mailing when the same should have been received in due course of post, or in the case of telegram) at the time of actual receipt, as the case may be.

406.0 PARTIAL USE OF SITE IMPROVEMENTS

The Owner, at its elections may give notice to the Contractor and place in use those sections of the improvements which have been completed, inspected, and can be accepted as complying with the Technical Specifications and if in its opinion, each such section is reasonably safe, fit and convenient, for the use and accommodation for which it was intended, provided;

406.1 The use of such sections of the Improvements shall in no way impede the completion of the remainder of the work by the Contractor.

406.2 The Contractor shall not be responsible for any damages or maintenance costs due directly to the use of such sections.

406.3 The use of such sections shall in no way relieve the Contractor or his liability due to having used defective materials or to poor workmanship.

406.4 The period of guarantee shall not begin to run until the date of the final acceptance of all work which the Contractor is required to construct under this Contract.

407.0 CONTRACT DOCUMENTS AND DRAWINGS

"Prospect Height Sewer Reconstruction," dated September 2022 is attached in Appendix E

The Contract Specifications are included in Appendix F attached to this document

The Federal Provisions associated with this Contract is attached in Appendix G.

408.0 NIGHT, SATURDAY AND SUNDAY WORK

Night, Saturday and Sunday work is prohibited unless written approval has been received from the City of Pawtucket.

409.0 EMPLOY SUFFICIENT LABOR AND EQUIPMENT

If, in the opinion of the Engineer, the Contractor is not employing sufficient labor or equipment to complete this contract within the time specified the Owner may, after giving written notice, require said Contractor to employ such additional labor and equipment as may be necessary to enable said work to progress properly.

410.0 INTOXICATING LIQUORS

The Contractor shall not sell and shall neither permit or suffer the introduction or use of intoxicating liquors upon or about the work embraced in this contract.

411.0 ACCESS TO WORK

The Owner and the Engineer, and their agents and employees may, for purposes already specified and for any other purpose, enter upon the work and the premises used by the Contractor, and the Contractor shall provide safe and proper facilities therefor.

412.0 TIME OF BEGINNING WORK

412.1 Except as herein provided, the Contractor shall commence work at such points as the Engineer may approve, within ten (10) days after the execution of this contract by the Owner.

412.2 Such time of starting may be postponed by written agreement between the Owner and the Contractor because of expected delays in receipt of materials and equipment, or if the season be unsuitable for commencement of the work, or because of other contingency clearly beyond the control or responsibility of the Contractor. Unless stipulated otherwise in said agreement, the Contractor shall commence work at such points as the Engineer may direct or approve, within 10 days after the receipt of a written order from the Owner to start work.

413.0 PROVISIONS FOR TRAFFIC

413.1 The Contractor shall not close or obstruct any portion of a street without obtaining permits for from the proper municipal authorities. If any street or private way shall be rendered unsafe by the Contractor's operations, he shall make such repairs or provide such temporary ways or guards as shall be acceptable to the Owner.

413.2 Streets, roads, private ways, and walks shall be maintained passable by the Contractor at his expense, and the Contractor shall assume full responsibility for the adequacy and safety of provisions made. He shall conduct his construction operations such that interference with the flow of traffic will be held to a minimum.

413.3 The Contractor shall cooperate in every way possible with the municipal authorities maintaining a flow of traffic through the site. The Contractor shall notify the Pawtucket Fire Department when any street is to be closed regardless of the length of time or time of day.

413.4 All detours shall be signed and lighted as directed by the City of Pawtucket.

414.0 COORDINATION WITH OUTSIDE PARTIES

414.1 The Contractor shall conduct his work so as to interfere as little as possible with private business and public travel. He shall at his own expense, wherever necessary or required, maintain fences, furnish watchmen, maintain lights and take such other precautions as may be necessary to protect life and property.

414.2 The Contractor shall take all responsibility for the protection of the work and for preventing injuries to persons and damage to property and utilities on or about the work. He shall not be

relieved of his responsibility by any right of the City to give permission or issue orders relating to any part of the work, or by any such permission given or orders issued, or by failure of the Engineer to give such permission or issue such orders. The Contractor shall bear all losses resulting to him or to the Owner on account of the amount of character of the work, or because nature of the land in or on which the work is done is different from what was estimated or expected, or on account of the weather, elements or other causes. The Contractor shall assume the defense of all claims or whatsoever character against the Contractor of the Owner, and indemnify, save harmless and insure the Owner, its officers or agents, against all claims arising out of injury or damage to persons, corporation, or property, whether said claims are for unavoidable damage or not, and from all claims relating to labor and materials furnished for the work. The Contractor shall not be required to indemnify the Owner against damage or claims occasioned by acts of the Owner, except otherwise provided in the articles relative to patents and responsibilities.

415.0 DELAY BY OWNER

The Owner may delay the beginning of the work or any part thereof, if the necessary lands or rights-of-way, or materials for such work shall not have been obtained. The Contractor shall have no claim for damages on account of such delay, but shall be entitled to so much additional time wherein to perform and complete this contract on his part as the City shall certify in writing to be just.

416.0 REGISTRATION OF MOTOR VEHICLES

All motor vehicles used in connection with this contract shall be registered in the State of Rhode Island, in accordance with the laws, rules, and regulations thereof, within forty-eight (48) hours of starting work on the contract.

417.0 PROVISIONS REQUIRED BY LAW DEEMED INSERTED

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, then upon the application of either party, the contract shall forthwith be physically amended to make such insertion.

418.0 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 and Health Act of 1970, Public Law 91-596;
- (2) Part 1910 - Occupation 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.

In the event of any inconsistencies between the above laws and regulations and the provisions of these documents, the laws and regulations shall prevail.

419.0 NOTIFICATION OF EXCAVATION TO UTILITIES

The Contractor shall provide a minimum of two working days notice to "Dig Safe" (1-800-225-4977) and any other appropriate utility before the Contractor begins excavation.

420.0 FEDERAL FUNDING REGULATIONS AND REQUIREMENTS

This project qualifies for Federal Funding under the Clean Water State Revolving Fund (CWSRF); therefore, it is the Contractor responsibility to review and implement the following requirements for the Federal documents listed below, attached as Appendix G:

- (1) EPA Memo: Prohibition on Certain Telecommunication and Video Surveillance Services or Equipment in the SRF Programs
- (2) Davis- Bacon Prevailing Wage Requirements (See Appendix C for Prevailing Wage Rates)
- (3) Disadvantaged Business Enterprise (DBE) Good Faith Efforts
- (4) DBE Subcontractor Participation Form
- (5) DBE Subcontractor Performance Form
- (6) DBE Subcontractor Utilization Form
- (7) SRF Contract Specifications Package
- (8) Project Sign Specifications
- (9) Debarment & Suspension Package
- (10) American Iron and Steel Requirements
- (11) RI Certified Weekly Payroll Form
- (12) RI Statement of Compliance Form
- (13) Federal Department of Labor Statement of Compliance Form

In the event of any inconsistencies between the above laws and regulations and the provisions of these documents, the laws and regulations shall prevail.

420.1 RI MBE/WBE Utilization Plans

For RI MBE/WBE Utilization Plan and related compliance forms, please see the RI DEDI webpage. The MBE Utilization Plan Form must be filled out and submitted to the MBE Compliance Office, and an approval letter received prior to the start of construction.

A **10%** DBE goal is required for this project.

420.2 Build America, Buy America (BABA) Act

All Clean Water State Revolving Fund (CWSRF) funded projects must comply with the requirements of the Build America, Buy America Act (included within the 2021 Infrastructure Investment and Jobs Act, aka the Bipartisan Infrastructure Law). The BABA requirement applies

to all of the iron, steel, manufactured products, and construction materials used in the project, which must be produced in the United States. The effective date of implementation is May 14, 2022.

Information on the BABA requirements can be found here:

<https://www.epa.gov/cwsrf/build-america-buy-america-baba>

The Infrastructure Investment and Jobs Act can be found here:

<https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf>

The Contractor acknowledges to and for the benefit of the **City of Pawtucket** (“Owner”) and the **Rhode Island Infrastructure Bank (RIIB)** (the “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.

Appendix A

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:

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.

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 agreements or 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 projects.

The rates of pay set forth under this contract, are the minimum to be paid during the life of the Contract. It is therefore, the responsibility of Bidders to inform themselves as to local labor conditions, such as the length of work day and work week, overtime compensation, health and welfare contributions, labor supply and prospective changes or adjustments of rates.

Certified weekly payrolls and statement of compliance forms are required from contractors and subcontractors. Submit on State of Rhode Island Department of Labor and Training forms.

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**

All construction contractors, independent tradesmen, or firms providing any type of maintenance, repair, or other type of service to be performed on City of Pawtucket premises, buildings, or grounds are required to purchase and maintain coverage with a company or companies licensed to do business in the state as follows:

- a. Comprehensive General Liability Insurance
Combined Single Limit not less than \$1,000,000 each occurrence for bodily Injury and property damage.
 - Independent Contractors;
 - Contractual - including construction hold harmless and other types of contracts or agreements in effect for insured operations;

- Products and Completed Operations;
 - Personal Injury (with employee exclusion deleted)
- b. Automobile Liability Insurance
Combined Single Limit not less than \$1,000,000 each occurrence for bodily Injury and property damage including non-owned and/or hired vehicle coverage.

OR

Bodily Injury, per person, \$500,000/ Bodily Injury, \$1,000,000 per accident/
Property Damage, \$500,000 per accident including non-owned and/or hired vehicle coverage.

- c. Workers' Compensation Insurance
As required by the General Laws of Rhode Island.
- Employers liability \$500,000

The City of Pawtucket shall be named as an additional insured on the vendor's Comprehensive General Liability Policy and Automobile Liability Policy.

The City of Pawtucket's Purchasing Agent reserves the right to consider and accept alternate forms and plans of insurance or to require additional or more extensive coverage for any individual requirement. Successful bidders shall provide certificates of coverage, reflecting the City of Pawtucket as an additional insured, to the City of Pawtucket Purchasing Office, forty-eight (48) hours prior to the commencement of work, as a condition of award. Failure to comply with this provision shall result in rejection of the offeror's bid.

31. BID SURETY

When requested, a bidder must furnish a Bid Bond or Certified Check for 5% 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.

Appendix C

General Wage Rate Decision Davis Bacon

The current wage determination (Heavy Construction, Providence County), as obtained from the Rhode Island Department of Labor and Training, is bound as part of this Project Manual.

"General Decision Number: RI20220001 09/09/2022

Superseded General Decision Number: RI20210001

State: Rhode Island

Construction Types: Building, Heavy (Heavy and Marine) and Highway

Counties: Rhode Island Statewide.

BUILDING CONSTRUCTION PROJECTS (does not include residential construction consisting of single family homes and apartments up to and including 4 stories) HEAVY, HIGHWAY AND MARINE CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

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

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	01/21/2022
2	02/18/2022
3	02/25/2022
4	04/01/2022
5	05/06/2022
6	05/27/2022
7	06/03/2022
8	06/24/2022
9	08/26/2022
10	09/09/2022

ASBE0006-006 06/01/2022

Rates	Fringes
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HAZARDOUS MATERIAL HANDLER (Includes preparation, wetting, stripping, removal scrapping, vacuuming, bagging & disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems).....	\$ 38.30	25.55
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ASBE0006-008 09/01/2021

Rates	Fringes
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Asbestos Worker/Insulator Includes application of all insulating materials, protective coverings, coatings & finishes to all types of mechanical systems.	\$ 45.00	32.89
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BOIL0029-001 01/01/2021

Rates	Fringes
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BOILERMAKER.....	\$ 45.87	29.02
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BRRI0003-001 06/01/2020

Rates	Fringes
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Bricklayer, Stonemason, Pointer, Caulker & Cleaner.....	\$ 42.55	28.02
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BRRI0003-002 03/01/2020

Rates	Fringes
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Marble Setter, Terrazzo Worker & Tile Setter.....	\$ 40.78	28.92
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BRRI0003-003 03/01/2020

Rates	Fringes
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Marble, Tile & Terrazzo Finisher.....	\$ 34.10	27.88
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CARP0330-001 06/05/2022

	Rates	Fringes
CARPENTER (Includes Soft Floor Layer).....	\$ 41.46	28.82
Diver Tender.....	\$ 40.72	28.66
DIVER.....	\$ 53.61	28.82
Piledriver.....	\$ 39.72	28.66
WELDER.....	\$ 42.46	28.82

FOOTNOTES:

When not diving or tending the diver, the diver and diver tender shall receive the piledriver rate. Diver tenders shall receive \$1.00 per hour above the pile driver rate when tending the diver.

Work on free-standing stacks, concrete silos & public utility electrical power houses, which are over 35 ft. in height when constructed: \$.50 per hour additional.

Work on exterior concrete shear wall gang forms, 45 ft. or more above ground elevation or on setback: \$.50 per hour additional.

The designated piledriver, known as the ""monkey"": \$1.00 per hour additional.

CARP1121-002 01/06/2020

	Rates	Fringes
MILLWRIGHT.....	\$ 39.07	29.15

ELEC0099-002 06/01/2022

	Rates	Fringes
ELECTRICIAN.....	\$ 45.86	52.71%
Teledata System Installer.....	\$ 34.40	12.10%+15.12

FOOTNOTES:

Work of a hazardous nature, or where the work height is 30 ft. or more from the floor, except when working OSHA-approved lifts: 20% per hour additional.

Work in tunnels below ground level in combined sewer outfall: 20% per hour additional.

ELEV0039-001 01/01/2022

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 56.91	36.885+a+b

FOOTNOTES:

A. PAID HOLIDAYS: New Years Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day; the Friday after Thanksgiving Day; and Christmas Day.

B. Employer contributes 8% basic hourly rate for 5 years or more of service of 6% basic hourly rate for 6 months to 5 years of service as vacation pay credit.

ENGI0057-001 06/01/2022

	Rates	Fringes
Operating Engineer: (power plants, sewer treatment plants, pumping stations, tunnels, caissons, piers, docks, bridges, wind turbines, subterranean & other marine and heavy construction work)		
GROUP 1.....	\$ 43.55	29.25+a
GROUP 2.....	\$ 41.55	29.25+a
GROUP 3.....	\$ 37.17	29.25+a
GROUP 4.....	\$ 34.32	29.25+a
GROUP 5.....	\$ 40.60	29.25+a
GROUP 6.....	\$ 31.40	29.25+a
GROUP 7.....	\$ 25.40	29.25+a
GROUP 8.....	\$ 37.25	29.25+a
GROUP 9.....	\$ 41.17	29.25+a

a. BOOM LENGTHS, INCLUDING JIBS:

150 feet and over + \$ 2.00
180 feet and over + \$ 3.00
210 feet and over + \$ 4.00
240 feet and over + \$ 5.00
270 feet and over + \$ 7.00
300 feet and over + \$ 8.00
350 feet and over + \$ 9.00
400 feet and over + \$10.00

a. PAID HOLIDAYS:

New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, Christmas Day. a: Any employee who works 3 days in the week in which a holiday falls shall be paid for the holiday.

a. FOOTNOTES:

Hazmat work: \$2.00 per hour additional.
Tunnel/Shaft work: \$5.00 per hour additional.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, lighters, boom trucks and derricks

GROUP 2: Digging machine, Ross Carrier, locomotive, hoist, elevator, bidwell-type machine, shot & water blasting machine, paver, spreader, graders, front end loader (3 yds. and over), vibratory hammer & vacuum truck, roadheaders, forklifts, econobile type equipment, tunnel boring machines, concrete pump and on site concrete plants.

GROUP 3: Oilers on cranes.

GROUP 4: Oiler on crawler backhoe.

GROUP 5: Bulldozer, bobcats, skid steer loader, tractor, scraper, combination loader backhoe, roller, front end loader (less than 3 yds.), street and mobile-powered sweeper (3-yd. capacity), 8-ft. sweeper minimum 65 HP).

GROUP 6: Well-point installation crew.

GROUP 7: Utility Engineers and Signal Persons

GROUP 8: Heater, concrete mixer, stone crusher, welding machine, generator and light plant, gas and electric driven pump and air compressor.

GROUP 9: Boat & tug operator.

ENGI0057-002 05/01/2022

	Rates	Fringes
Power Equipment Operator (highway construction projects; water and sewerline projects which are incidental to highway construction projects; and bridge projects that do not span water)		
GROUP 1.....	\$ 36.70	29.25+a
GROUP 2.....	\$ 31.40	29.25+a
GROUP 3.....	\$ 25.40	29.25+a
GROUP 4.....	\$ 31.98	29.25+a
GROUP 5.....	\$ 35.68	29.25+a
GROUP 6.....	\$ 35.30	29.25+a
GROUP 7.....	\$ 30.95	29.25+a
GROUP 8.....	\$ 32.33	29.25+a
GROUP 9.....	\$ 34.28	29.25+a

a. FOOTNOTE: a. Any employee who works three days in the week in which a holiday falls shall be paid for the holiday.

a. PAID HOLIDAYS: New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day & Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Digging machine, crane, piledriver, lighter, locomotive, derrick, hoist, boom truck, John Henry's, directional drilling machine, cold planer, reclaimer, paver, spreader, grader, front end loader (3 yds. and over), vacuum truck, test boring machine operator, veemere saw, water blaster, hydro-demolition robot, forklift, economobile, Ross Carrier, concrete pump operator and boats

GROUP 2: Well point installation crew

GROUP 3: Utility engineers and signal persons

GROUP 4: Oiler on cranes

GROUP 5: Combination loader backhoe, front end loader (less than 3 yds.), forklift, bulldozers & scrapers and boats

GROUP 6: Roller, skid steer loaders, street sweeper

GROUP 7: Gas and electric drive heater, concrete mixer, light plant, welding machine, pump & compressor

GROUP 8: Stone crusher

GROUP 9: Mechanic & welder

ENGI0057-003 06/01/2022

BUILDING CONSTRUCTION

	Rates	Fringes
Power Equipment Operator		
GROUP 1.....	\$ 42.82	29.25+a
GROUP 2.....	\$ 40.82	29.25+a
GROUP 3.....	\$ 40.60	29.25+a
GROUP 4.....	\$ 36.60	29.25+a
GROUP 5.....	\$ 33.75	29.25+a
GROUP 6.....	\$ 39.90	29.25+a
GROUP 7.....	\$ 39.47	29.25+a
GROUP 8.....	\$ 36.79	29.25+a

a. BOOM LENGTHS, INCLUDING JIBS:

150 ft. and over: + \$ 2.00
180 ft. and over: + \$ 3.00
210 ft. and over: + \$ 4.00
240 ft. and over: + \$ 5.00
270 ft. and over: + \$ 7.00
300 ft. and over: + \$ 8.00
350 ft. and over: + \$ 9.00
400 ft. and over: + \$10.00

a. PAID HOLIDAYS: New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day & Christmas Day. a: Any employee who works 3 days in the week in which a holiday falls shall be paid for the holiday.

a. FOOTNOTE: Hazmat work: \$2.00 per hour additional.
Tunnel/Shaft work: \$5.00 per hour additional.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, lighters, boom trucks and derricks.

GROUP 2: Digging machine, Ross carrier, locomotive, hoist, elevator, bidwell-type machine, shot & water blasting machine, paver, spreader, front end loader (3 yds. and over), vibratory hammer and vacuum truck

GROUP 3: Telehandler equipment, forklift, concrete pump & on-site concrete plant

GROUP 4: Fireman & oiler on cranes

GROUP 5: Oiler on crawler backhoe

GROUP 6: Bulldozer, skid steer loaders, bobcats, tractor, grader, scraper, combination loader backhoe, roller, front end loader (less than 3 yds.), street and mobile powered sweeper (3 yds. capacity), 8-ft. sweeper (minimum 65 hp)

GROUP 7: Well point installation crew

GROUP 8: Heater, concrete mixer, stone crusher, welding machine, generator for light plant, gas and electric driven pump & air compressor

IRON0037-001 09/16/2021

	Rates	Fringes
IRONWORKER.....	\$ 38.21	30.58

LAB00271-001 05/30/2021

BUILDING CONSTRUCTION

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 33.55	26.15
GROUP 2.....	\$ 33.80	26.15
GROUP 3.....	\$ 34.30	26.15
GROUP 4.....	\$ 34.55	26.15
GROUP 5.....	\$ 35.55	26.15

LABORERS CLASSIFICATIONS

GROUP 1: Laborer, Carpenter Tender, Mason Tender, Cement Finisher Tender, Scaffold Erector, Wrecking Laborer, Asbestos Removal [Non-Mechanical Systems]

GROUP 2: Asphalt Raker, Adzemen, Pipe Trench Bracer, Demolition Burner, Chain Saw Operator, Fence & Guard Rail Erector, Setter of Metal Forms for Roadways, Mortar Mixer, Pipelayer, Riprap & Dry Stonewall Builder, Highway Stone Spreader, Pneumatic Tool Operator, Wagon Drill Operator, Tree Trimmer, Barco-Type Jumping Tamper, Mechanical Grinder Operator

GROUP 3: Pre-Cast Floor & Roof Plank Erectors

GROUP 4: Air Track Operator, Hydraulic & Similar Self-Powered Drill, Block Paver, Rammer, Curb Setter, Powderman & Blaster

GROUP 5: Toxic Waste Remover

LAB00271-002 05/30/2021

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
LABORER		
COMPRESSED AIR		
Group 1.....	\$ 53.45	24.15
Group 2.....	\$ 50.98	24.15
Group 3.....	\$ 40.50	24.15
FREE AIR		
Group 1.....	\$ 44.05	24.15
Group 2.....	\$ 43.05	24.15
Group 3.....	\$ 40.50	24.15
LABORER		

Group 1.....	\$ 33.55	24.15
Group 2.....	\$ 33.80	24.15
Group 3.....	\$ 34.55	24.15
Group 4.....	\$ 27.05	24.15
Group 5.....	\$ 35.55	24.15
OPEN AIR CAISSON, UNDERPINNING WORK AND BORING CREW		
Bottom Man.....	\$ 39.55	24.15
Top Man & Laborer.....	\$ 38.60	24.15
TEST BORING		
Driller.....	\$ 40.00	24.15
Laborer.....	\$ 38.60	24.15

LABORER CLASSIFICATIONS

GROUP 1: Laborer; Carpenter tender; Cement finisher tender; Wrecking laborer; Asbestos removers [non-mechanical systems]; Plant laborer; Driller in quarries

GROUP 2: Adzeperson; Asphalt raker; Barcotype jumping tamper; Chain saw operators; Concrete and power buggy operator; Concrete saw operator; Demolition burner; Fence and guard rail erector; Highway stone spreader; Laser beam operator; Mechanical grinder operator; Mason tender; Mortar mixer; Pneumatic tool operator; Riprap and dry stonewall builder; Scaffold erector; Setter of metal forms for roadways; Wagon drill operator; Wood chipper operator; Pipelayer; Pipe trench bracer

GROUP 3: Air track drill operator; Hydraulic and similar powered drills; Brick paver; Block paver; Rammer and curb setter; Powderperson and blaster

GROUP 4: Flagger & signaler

GROUP 5: Toxic waste remover

LABORER - COMPRESSED AIR CLASSIFICATIONS

GROUP 1: Mucking machine operator, tunnel laborer, brake person, track person, miner, grout person, lock tender, gauge tender, miner: motor person & all others in compressed air

GROUP 2: Change house attendant, powder watchperson, top person on iron

GROUP 3: Hazardous waste work within the ""HOT"" zone

LABORER - FREE AIR CLASSIFICATIONS

GROUP 1: Grout person - pumps, brake person, track person, form mover & stripper (wood & steel), shaft laborer, laborer topside, outside motorperson, miner, conveyor operator, miner welder, heading motorperson, erecting operator, mucking machine operator, nozzle person, rodperson, safety miner, shaft & tunnel, steel & rodperson, mole nipper, concrete worker, form erector (wood, steel and all accessories), cement finisher (this type of work only), top signal person, bottom person (when heading is 50' from shaft), burner, shield operator and TBM operator

GROUP 2: Change house attendant, powder watchperson

GROUP 3: Hazardous waste work within the ""HOT"" zone

PAIN0011-005 06/01/2021

	Rates	Fringes
PAINTER		
Brush and Roller.....	\$ 36.42	22.90
Epoxy, Tanks, Towers, Swing Stage & Structural Steel.....	\$ 38.42	22.90
Spray, Sand & Water Blasting.....	\$ 39.42	22.90
Taper.....	\$ 37.17	22.90
Wall Coverer.....	\$ 36.92	22.90

PAIN0011-006 06/01/2022

	Rates	Fringes
GLAZIER.....	\$ 40.78	23.40

FOOTNOTES:

SWING STAGE: \$1.00 per hour additional.

PAID HOLIDAYS: Labor Day & Christmas Day.

PAIN0011-011 06/01/2022

	Rates	Fringes
Painter (Bridge Work).....	\$ 55.00	23.75

PAIN0035-008 06/01/2011

	Rates	Fringes
Sign Painter.....	\$ 24.79	13.72

PLAS0040-001 06/03/2019

BUILDING CONSTRUCTION

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 36.00	27.15

FOOTNOTE: Cement Mason: Work on free swinging scaffolds under
3 planks width and which is 20 or more feet above ground
and any offset structure: \$.30 per hour additional.

PLAS0040-002 07/01/2019

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 32.85	22.20

PLAS0040-003 07/01/2019

	Rates	Fringes
PLASTERER.....	\$ 37.55	27.50

* PLUM0051-002 08/29/2022

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 47.89	31.40

ROOF0033-004 06/01/2022

	Rates	Fringes
ROOFER.....	\$ 42.23	29.00

SFRI0669-001 04/01/2022

	Rates	Fringes
SPRINKLER FITTER.....	\$ 47.55	29.38

SHEE0017-002 12/01/2020

	Rates	Fringes
Sheet Metal Worker.....	\$ 38.58	36.73

TEAM0251-001 05/01/2022

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
TRUCK DRIVER		
GROUP 1.....	\$ 28.46	32.10+A+B+C
GROUP 2.....	\$ 28.61	\$ 32.10+A+B+C
GROUP 3.....	\$ 28.66	\$ 32.10+A+B+C
GROUP 4.....	\$ 28.71	\$ 32.10+A+B+C
GROUP 5.....	\$ 28.81	\$ 32.10+A+B+C
GROUP 6.....	\$ 29.21	\$ 32.10+A+B+C
GROUP 7.....	\$ 29.41	\$ 32.10+A+B+C
GROUP 8.....	\$ 28.91	\$ 32.10+A+B+C
GROUP 9.....	\$ 29.16	\$ 32.10+A+B+C
GROUP 10.....	\$ 28.96	\$ 32.10+A+B+C

FOOTNOTES:

A. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, plus Presidents' Day, Columbus Day, Veteran's Day & V-J Day, providing the employee has worked at least one day in the calendar week in which the holiday falls.

B. Employee who has been on the payroll for 1 year or more but less than 5 years and has worked 150 Days during the last year of employment shall receive 1 week's paid vacation; 5 to 10 years - 2 weeks' paid vacation; 10 or more years - 3 week's paid vacation.

C. Employees on the seniority list shall be paid a one hundred dollar (\$100.00) bonus for every four hundred (400) hours worked, up to a maximum of five hundred dollars (\$500.00)

All drivers working on a defined hazard material job site shall be paid a premium of \$2.00 per hour over applicable rate.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Pick-up trucks, station wagons, & panel trucks

GROUP 2: Two-axle on low beds

GROUP 3: Two-axle dump truck

GROUP 4: Three-axle dump truck

GROUP 5: Four- and five-axle equipment

GROUP 6: Low-bed or boom trailer.

GROUP 7: Trailers when used on a double hook up (pulling 2 trailers)

GROUP 8: Special earth-moving equipment, under 35 tons

GROUP 9: Special earth-moving equipment, 35 tons or over

GROUP 10: Tractor trailer

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

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

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the

cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

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

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

Survey Rate Identifiers

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

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

Union Average Rate Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION"

Appendix D

City of Pawtucket Standard Form of Agreement (Sample)

**CONTRACT AGREEMENT
FOR:**

PROJECT_TITLE



PAWTUCKET, RHODE ISLAND

PURCHASING DIVISION
137 ROOSEVELT AVE.
PAWTUCKET, RHODE ISLAND

MM/DD/YYYY

CONTRACT AGREEMENT

PROJECT_TITLE

Pawtucket, Rhode Island

1. AGREEMENT FOR SERVICES

This Agreement for Services (hereinafter the "Agreement" or "Contract") made this ##th day of ####, 2015 between the City of Pawtucket, a municipal corporation of the State of Rhode Island, with a business address of 137 Roosevelt Avenue, Pawtucket, Rhode Island (hereinafter the "City") and VENDOR, a company authorized to do business in the State of Rhode Island, with a business address of ##### (hereinafter the "Consultant").

2. SCOPE OF CONSULTANT SERVICES

This is a contract to provide the City with consulting services as specified herein and as set forth in the following Exhibits, all of which are attached hereto and incorporated into this Agreement by reference herein:

- Exhibit 1 – RFP #####;
- Exhibit 2 – Rhode Island Department of Labor and Training Municipal Contract Addendum;

and all addenda issued and any resulting negotiations, and the RFP response received by the City from the Consultant.

3. COMPENSATION FOR SERVICES

The City shall pay the Consultant in the following sums for work performed under this Agreement after the effective date as set out below:

\$#####

The payment and performance of any obligations under this contract for years beyond the first fiscal year are subject to the availability of funds. Payment will not be made until services have been fully performed and accepted, and upon a properly submitted invoice. All invoices must clearly display the purchase order number.

4. RHODE ISLAND LAW AND FORUM

(a) This Agreement shall be construed according to the law of the State of Rhode Island.

(b) Any litigation between the City and the Consultant arising under this Agreement or out of work performed under this Agreement shall occur, if in the state courts, in the Providence County Superior Court, and in the federal courts, in the United States District Court for the District of Rhode Island.

5. NOTICE

Any notice provided for under this Agreement shall be sufficient if in writing and delivered personally to the following addressee or deposited in the United States mail, postage prepaid, certified mail, return receipt requested, addressed as follows, or to such other address as the receiving party hereafter shall specify in writing:

If to the City:

Andrew Silvia, PE, Chief of Project Development
250 Armistice Boulevard
Pawtucket, RI 02860

If to the Consultant:

#####

6. COMPLIANCE WITH LAWS

Consultant shall materially comply with any and all Federal, state and local laws and regulations now in force and which may hereafter during the term of this contract, be enacted and become effected which are applicable, as well as obtaining any and all required permits and licenses.

7. TIMEFRAME TO COMPLETE

The Consultant shall complete the consulting services located in the City of Pawtucket, Rhode Island no later than #####.

8. WAIVERS

No waiver of any breach or any one or more of the conditions or covenants of this Contract by City or Consultant shall be deemed to imply or to constitute a waiver of any prior or succeeding breach; and the failure of City or Consultant to insist upon the strict performance of the terms, covenants, agreements and conditions herein contained or any one of them shall not constitute or be construed as a waiver or relinquishment of City's or Consultant's right to thereafter enforce any such default, or any term, covenants, agreement or condition.

CONSULTANT (VENDOR)

WITNESS

Subscribed and sworn to before me in the _____
on this _____ day of _____, 2015.

NOTARY PUBLIC
My Commission Expires:

CITY OF PAWTUCKET

WITNESS

Subscribed and sworn to before me in the _____
on this _____ day of _____, 2015.

NOTARY PUBLIC
My Commission Expires:

EXHIBIT 1:

RFP #####

SAMPLE

EXHIBIT 2:

RHODE ISLAND DLT MUNICIPAL CONTRACT ADDENDUM

SAMPLE

MUNICIPAL CONTRACT ADDENDUM
RHODE ISLAND DEPARTMENT OF LABOR AND TRAINING
PREVAILING WAGE REQUIREMENTS
(37-13-1 ET SEQ.)

The prevailing wage requirements are generally set forth in RIGL 37-13-1 et seq. These requirements refer to the prevailing rate of pay for regular, holiday, and overtime wages to be paid to each craftsmen, mechanic, teamster, laborer, or other type of worker performing work on public works projects when state or municipal funds exceed one thousand dollars (\$1,000).

All Prevailing Wage Contractors and Subcontractors are required to:

1. Submit to the Awarding Authority a list of the contractor's subcontractors for any part or all of the prevailing wage work in accordance with RIGL § 37-13-4;
2. Pay all prevailing wage employees at least once per week and in accordance with RIGL §37-13-7 (see Appendix B attached);
3. Post the prevailing wage rate scale and the Department of Labor and Training's prevailing wage poster in a prominent and easily accessible place on the work site in accordance with RIGL § 37-13-11; posters may be downloaded at www.dlt.ri.gov/pw/Posters.htm or obtained from the Department of Labor and Training, Center General Complex, 1511 Pontiac Avenue, Cranston, Rhode Island;
4. Access the Department of Labor and Training website, at www.dlt.ri.gov on or before July 1st of each year, until such time as the contract is completed, to ascertain the current prevailing wage rates and the amount of payment or contributions for each covered prevailing wage employee and make any necessary adjustments to the covered employee's prevailing wage rates effective July 1st of each year in compliance with RIGL §37-13-8;
5. Attach a copy of this CONTRACT ADDENDUM and its attachments as a binding obligation to any and all contracts between the contractor and any subcontractors and their assignees for prevailing wage work performed pursuant to this contract;
6. Provide for the payment of overtime for prevailing wage employees who work in excess of eight (8) hours in any one day or forty (40) hours in any one week as provided by RIGL §37-13-10;

7. Maintain accurate prevailing wage employee payroll records on a Rhode Island Certified Weekly Payroll form available for download at www.dlt.ri.gov/pw/forms/htm, as required by RIGL §37-13-13, and make those records available to the Department of Labor and Training upon request;
8. Furnish the fully executed RI Certified Weekly Payroll Form to the awarding authority on a monthly basis for all work completed in the preceding month.
9. For general or primary contracts one million dollars (\$1,000,000) or more, shall maintain on the work site a fully executed RI Certified Prevailing Wage Daily Log listing the contractor's employees employed each day on the public works site; the RI Certified Prevailing Wage Daily Log shall be available for inspection on the public works site at all times; this rule shall not apply to road, highway, or bridge public works projects. Where applicable, furnish both the Rhode Island Certified Prevailing Wage Daily Log together with the Rhode Island Weekly Certified Payroll to the awarding authority.
10. Assure that all covered prevailing wage employees on construction projects with a total project cost of one hundred thousand dollars (\$100,000) or more has a OSHA ten (10) hour construction safety certification in compliance with RIGL § 37-23-1;
11. Assure that all prevailing wage employees who perform work which requires a Rhode Island trade license possess the appropriate Rhode Island trade license in compliance with Rhode Island law; and
12. Comply with all applicable provisions of RIGL §37-13-1, et. seq;

Any questions or concerns regarding this CONTRACT ADDENDUM should be addressed to the contractor or subcontractor's attorney. Additional Prevailing Wage information may be obtained from the Department of Labor and Training at www.dlt.ri.gov/pw.

CERTIFICATION

I hereby certify that I have reviewed this CONTRACT ADDENDUM and understand my obligations as stated above.

By: _____

Title: _____

Subscribed and sworn before me this ____ day of _____, 20__.

Notary Public

My commission expires: _____

SAMPLE

APPENDIX A

TITLE 37
Public Property and Works
CHAPTER 37-13
Labor and Payment of Debts by Contractors
SECTION 37-13-5

§ 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 materialman 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.

APPENDIX B

TITLE 37

Public Property and Works

CHAPTER 37-13

Labor and Payment of Debts by Contractors

SECTION 37-13-7

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

– (a) 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 higher education assistance authority, 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.

SAMPLE

Appendix E

Site Plans Issued for Bid

PROSPECT HEIGHTS SEWER RECONSTRUCTION

Beverage Hill Avenue
Pawtucket, Rhode Island

CIVIL ENGINEER:

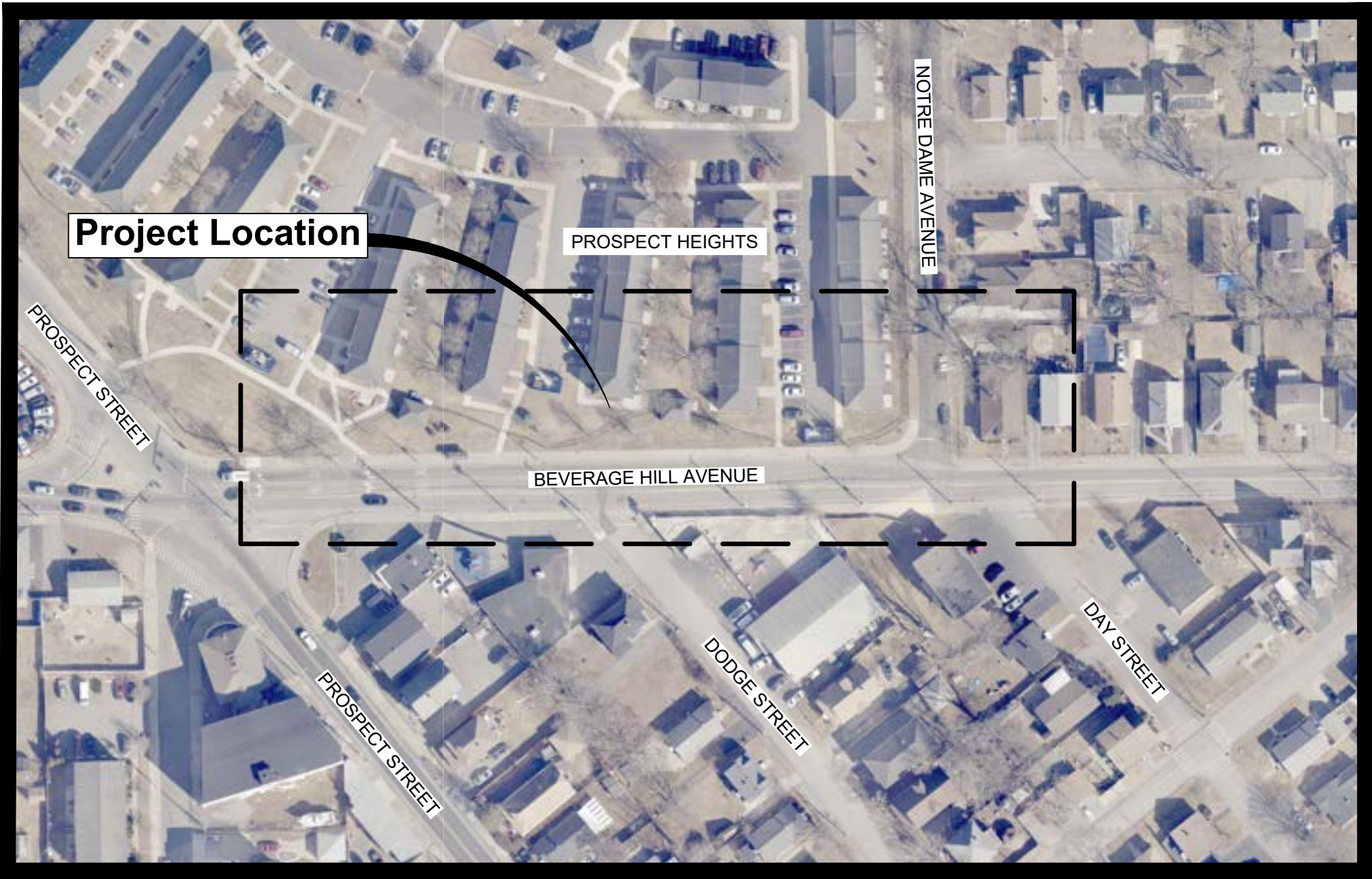


PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BUCKSTONE VALLEY PLACE LINCOLN, RI 02865 401-334-4100
10 LINCOLN ROAD, SUITE 210 FOWERS, MA 02035 508-943-1755
14 BOWMAN ROAD, SUITE 308 HOLYOKE, MA 01040 413-507-3448

OWNER/APPLICANT:



CITY OF PAWTUCKET
137 Roosevelt Avenue
Pawtucket, RI 02860 (401) 728-0500



SCALE: 1"=100'

LENGTH OF PROJECT: 0.11 MILES

OCTOBER 21, 2022

INDEX OF DRAWINGS

SHEET No.	DRAWING No.	DESCRIPTION
1	-	COVER SHEET
2	C0.1	NOTES
3	C0.2	LEGEND
4	C1.0	EXISTING CONDITIONS PLAN
5	C2.0	GENERAL PLAN
6	C3.0	DRAINAGE AND UTILITY PLAN
7	C4.0	DRAINAGE AND SEWER PROFILE
8 - 11	C5.1 - C5.4	TEMPORARY TRAFFIC CONTROL PLAN NO. 1 TO 4
12 - 14	C6.1 - C6.3	DETAILS NO. 1 TO 3

PROJECT LOCATION: BEVERAGE HILL AVENUE FROM PROSPECT STREET TO DAY STREET PAWTUCKET, RHODE ISLAND

- ## GENERAL NOTES

- ## LAYOUT NOTES

- DEMOLITION NOTES

- C0.1
- SHEET NO. 2 OF 14

























RHODE ISLAND STANDARD DETAILS

- 4.2.0 = PRECAST 4'-0" ROUND MANHOLE
- 4.4.0 = PRECAST 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN
- 6.2.0 = ROUND FRAME AND COVER LIGHT-DUTY
- 6.2.1 = HEAVY-DUTY ROUND FRAME AND COVER
- 6.3.2 = SQUARE FRAME AND GRATE (BICYCLE SAFE)
- 7.1.0C = CEMENT CONCRETE CURB PRECAST-CIRCULAR
- 7.1.0S = CEMENT CONCRETE CURB PRECAST-STRAIGHT
- 7.1.3 = CEMENT CONCRETE WHEELCHAIR RAMP TRANSITION CURB PRECAST
- 7.1.8 = PRECAST CONCRETE APRON STONE (FOR ROUND CATCH BASINS)
- 7.1.9 = PRECAST CONCRETE RAMP STONE 18-INCH PRECAST- CIRCULAR
- 7.6.0 = CURB SETTING DETAIL
- 20.1.0 = FINAL EPOXY RESIN PAVEMENT MARKINGS SYMBOL- ARROW (STRAIGHT, LEFT, RIGHT, OR COMBINED) OR WORD ("ONLY")
- 20.3.0 = PAVEMENT MARKINGS- STOP LINE (12 INCH FINAL EPOXY RESIN PAVEMENT MARKINGS- WHITE)
- 43.1.0 = CEMENT CONCRETE SIDEWALK
- 43.3.0 = CEMENT CONCRETE WHEELCHAIR RAMP
- 48.1.0 = DETECTABLE WARNING PANEL

JOB SPECIFIC LEGEND

- | | | |
|--------|---|---|
| CCB | = | CLEAN CATCH BASIN (ALL TYPES) |
| CFP | = | CLEAN AND FLUSH PIPES (ALL TYPES AND SIZES) |
| CPP | = | CUT AND CAP PIPE WITH RESTRAINT (ALL TYPES AND SIZES) |
| DC | = | REMOVE AND DISPOSE CONCRETE CURB |
| DCB | = | REMOVE AND DISPOSE CATCH BASIN |
| DFC | = | REMOVE AND DISPOSE FRAME AND COVER |
| DFG | = | REMOVE AND DISPOSE FRAME AND GRATE |
| DMH | = | REMOVE AND DISPOSE MANHOLE |
| DP | = | REMOVE AND DISPOSE PIPE |
| DSW | = | REMOVE AND DISPOSE SIDEWALK |
| DT | = | REMOVE AND DISPOSE TREE |
| ETR | = | EXISTING TO REMAIN |
| ISCD | = | INLET SEDIMENT CONTROL DEVICE |
| RPM | = | REMOVE PAVEMENT MARKINGS |
| SPMH-1 | = | PRECAST 4'-0" ROUND MANHOLE (DEPTH GREATER THAN 12'-0") (SEE DETAILS) |
| SPMH-2 | = | PRECAST 6'-0" ROUND MANHOLE (DEPTH GREATER THAN 12'-0") (SEE DETAILS) |
| SPMH-3 | = | PRECAST 8'-0" ROUND MANHOLE (DEPTH GREATER THAN 12'-0") (SEE DETAILS) |
| TEP | = | TIE EXISTING PIPE INTO NEW STRUCTURE |
| TNP | = | TIE NEW PIPE INTO EXISTING STRUCTURE |
| 4DY | = | 4 INCH FINAL EPOXY RESIN PAVEMENT MARKINGS - DOUBLE YELLOW |
| 6TW | = | 6 INCH TEMPORARY PAVEMENT MARKINGS - WHITE |
| 6TY | = | 6 INCH TEMPORARY PAVEMENT MARKINGS - YELLOW |
| 6W | = | 6 INCH FINAL EPOXY RESIN PAVEMENT MARKINGS- WHITE |

LEGEND

EXISTING		PROPOSED
	CONTOUR	
	DRAINAGE LINE	
	WATER LINE	
	SANITARY SEWER LINE	
	GAS LINE	
	ELECTRIC	
	FIBEROPTIC LINE	
	SAWCUT	
	SEWER MANHOLE	
	CATCH BASIN	
	DRAINAGE MANHOLE	
	UTILITY POLE	
	WATER VALVE	
	GAS VALVE	
	BENCHMARK	

SCALE ADJUSTMENT GUIDE

0" 1"

BAR IS ONE INCH ON ORIGINAL DRAWING

PROSPECT HEIGHTS SEWER RECONSTRUCTION
Beverage Hill Avenue
Pawtucket, Rhode Island



REVISIONS:

[illegible]

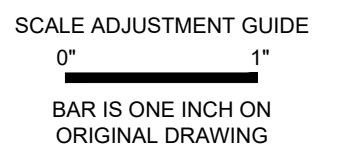
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CHECKED BY:	DH
DRAWN BY:	AWB
APPROVED BY:	LH
DRAWING TITLE:	

LEGEND

DRAWING NO.:

C0.2

SHEET NO. 3 OF 14



PROSPECT HEIGHTS SEWER RECONSTRUCTION
Beverage Hill Avenue
Pawtucket, Rhode Island



REVISIONS:

[illegible]

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SCALE:	1" = 20'
DESIGNED BY:	KJS
CHECKED BY:	DH
DRAWN BY:	AWB
APPROVED BY:	LH
DRAWING TITLE:	

EXISTING CONDITIONS
PLAN

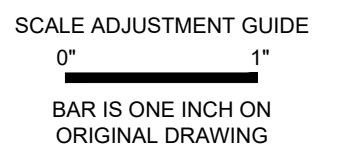
DRAWING NO.:
C1.0

SHEET NO. 4 OF 14



Scale: 1"=20'





PROSPECT HEIGHTS SEWER RECONSTRUCTION
Beverage Hill Avenue
Pawtucket, Rhode Island



REVISIONS:

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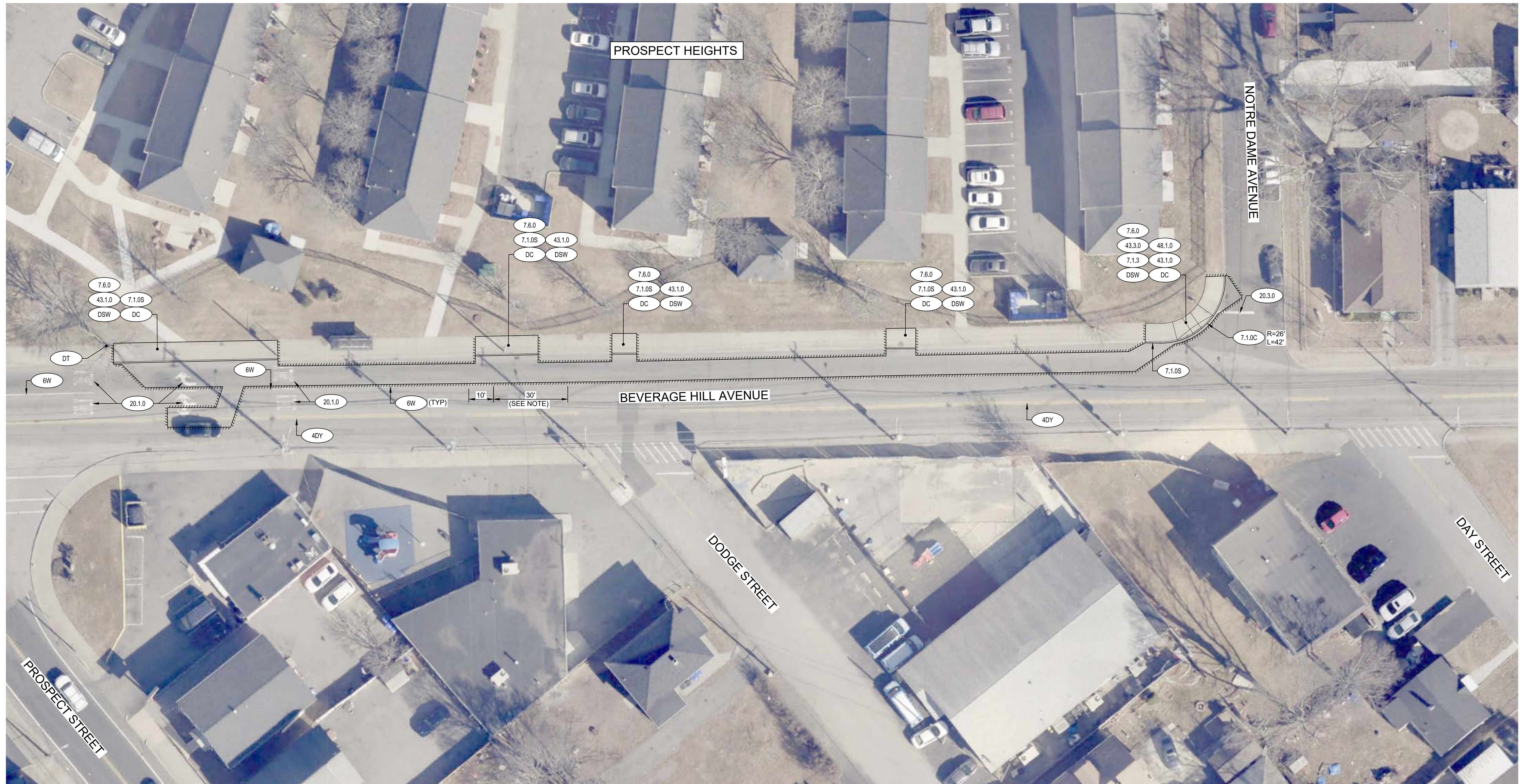
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CHECKED BY:	DH
DRAWN BY:	AWB
APPROVED BY:	LH
DRAWING TITLE:	

GENERAL PLAN

DRAWING NO.:

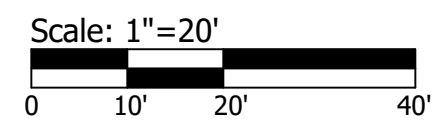
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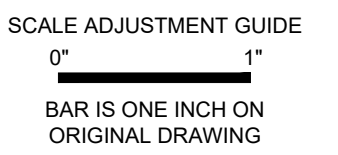
SHEET NO. 5 OF 14



NOTE

THE BROKEN WHITE LINE SHALL BE INSTALLED WITH A 10' STRIPE AND 30' SPACE






PROJECT NO.:	22063.00
DATE:	OCTOBER 21, 2022
SCALE:	1" = 20'
DESIGNED BY:	KJS
CHECKED BY:	DH
DRAWN BY:	AWB
APPROVED BY:	LH
DRAWING TITLE:	

DRAWING NO.:
C3.0
SHEET NO. 6 OF 14

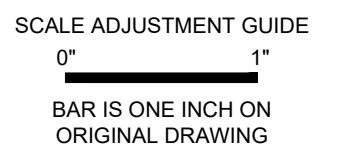


1. RIM ELEVATIONS SHOWN ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.
2. SEE SHEET 6 "DRAINAGE AND SEWER PROFILE" FOR THE PROPOSED DRAINAGE AND SEWER PROFILE PLANS.
3. THE EXISTING 60" DRAINAGE PIPE AND 24" PVC SEWER PIPE IS TO BE ABANDONED IN PLACE UNLESS OTHERWISE NOTED ON THE PLANS.
4. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL CONDUCT AN EXPLORATORY TEST PIT AT THE LOCATION SHOWN TO VERIFY THAT THERE IS NO EXISTING SHEETING REMAINING FROM THE PREVIOUS SEWER RELOCATION.

Scale: 1"=20'

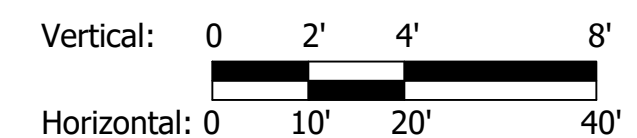
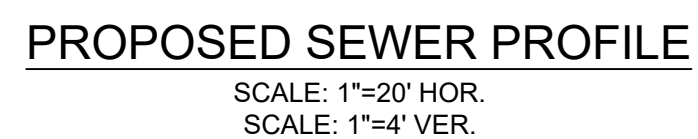
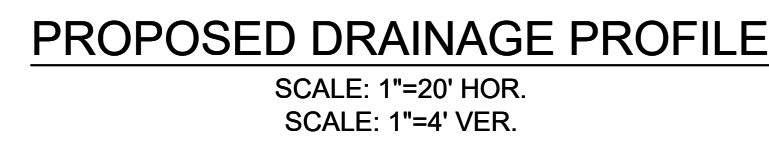


A horizontal scale bar with alternating black and white segments. It is marked with 0, 10', 20', and 40'.

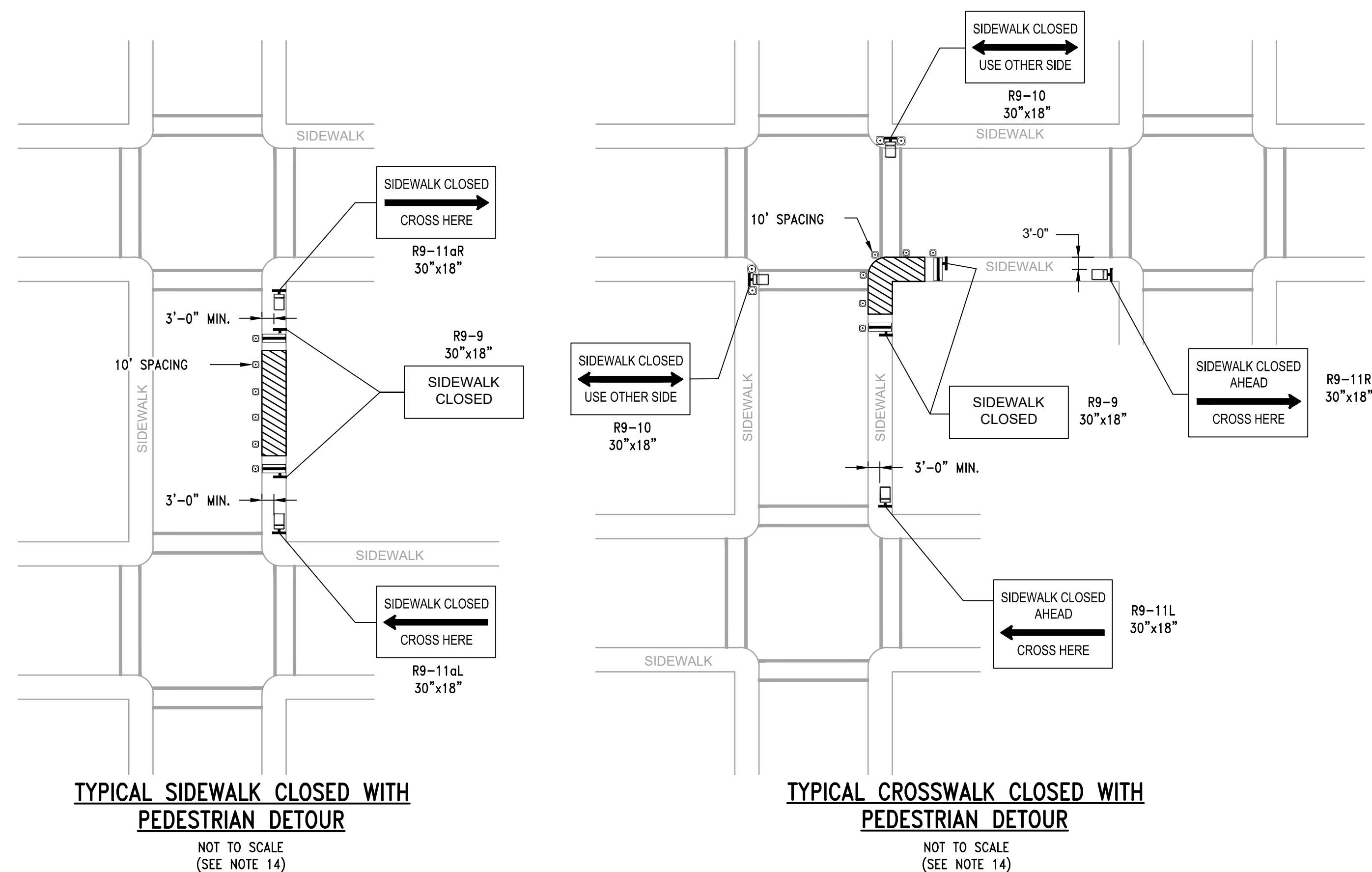
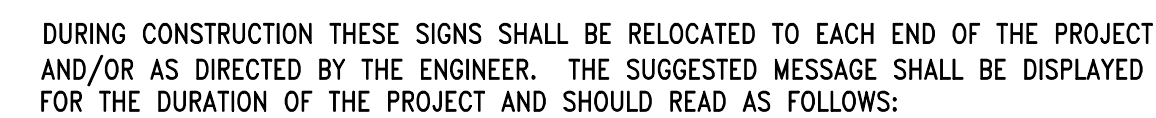













PROJECT NO.:	22063.00
DATE:	OCTOBER 21, 2022
SCALE:	1" = 20'
DESIGNED BY:	KJS
CHECKED BY:	DH
DRAWN BY:	AWB
APPROVED BY:	LH
DRAWING TITLE:	

RAWING NO.:
C4.0
HEET NO. 7 OF 14



1. SEE "TEMPORARY TRAFFIC CONTROL PLAN NO. 4" FOR DETOUR PLAN.
2. THE DETOUR SHALL BE IN PLACE PRIOR TO THE CLOSING OF THE WORK AREA.
3. ALL SIGNS MAY BE FIELD ADJUSTED AS DIRECTED BY THE RESIDENT ENGINEER.
4. THE CONTRACTOR MUST COVER ALL SIGNS WHEN THE DETOUR IS NOT IN PLACE.
5. CONTRACTOR TO REMOVE BARRIERS AS NECESSARY TO GAIN ACCESS TO THE SITE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 3 "TRAFFIC CONTROL AND MANAGEMENT".
6. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED ON THE SHOULDER OF THE ROADWAY OR, IF PRACTICAL, SET WELL AWAY FROM THE TRAVEL LANE. MESSAGE SIGNS SHOULD BE PROTECTED WITH RETROREFLECTIVE TEMPORARY TRAFFIC CONTROL DEVICES WHEN PLACED WITHIN THE AVAILABLE CLEAR ZONE OR ELSE SHIELDED WITH BARRIER OR CRASH CUSHION. THE LOCATION AND USE OF THE PCMS SHALL BE DETERMINED DURING THE PRE-CONSTRUCTION MEETING OR AS DIRECTED BY THE RESIDENT ENGINEER. THE SUGGESTED MESSAGE SHALL BE DISPLAYED TWO WEEKS IN ADVANCED OF CONSTRUCTION AND SHOULD READ AS FOLLOWS:



- | | |
|---|---|
|  | DRUM R.I. STD. 26.2.0 |
|  | FLUORESCENT TRAFFIC CONE R.I. STD. 26.1.0 |
|  | DIRECTION OF TRAFFIC |
|  | TEMPORARY SIGN |
|  | WORK AREA |
|  | PLASTIC PIPE BARRICADE R.I. STD. 26.3.0 |
|  | FLAG PERSON |
|  | LONGITUDINAL PEDESTRIAN CHANNELIZING DEVICE |
|  | TEMPORARY BARRIER LIMITED DEFLECTION (TL-2) |
|  | NARROW TEMPORARY IMPACT ATTENUATOR (ETEA)(TL-2) |
|  | TEMPORARY FENCE |

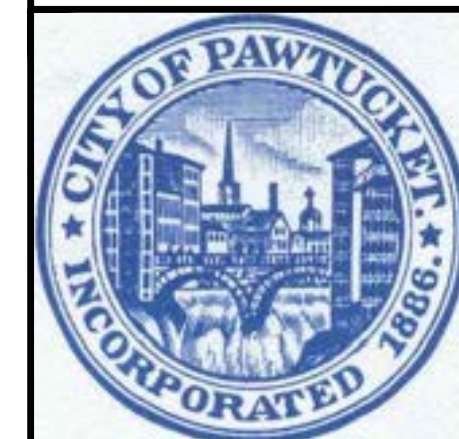


SCALE ADJUSTMENT GUIDE

0" 1"

BAR IS ONE INCH ON ORIGINAL DRAWING

PROSPECT HEIGHTS SEWER RECONSTRUCTION
Beverage Hill Avenue
Pawtucket, Rhode Island



REVISIONS:

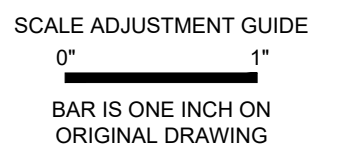
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PROJECT NO.:	22063.00
DATE:	OCTOBER 21, 2022
SCALE:	AS NOTED
DESIGNED BY:	KJS
CHECKED BY:	DH
DRAWN BY:	AWB
APPROVED BY:	LH
DRAWING TITLE:	

TEMPORARY
TRAFFIC CONTROL
PLAN No. 1

DRAWING NO.: C5.1

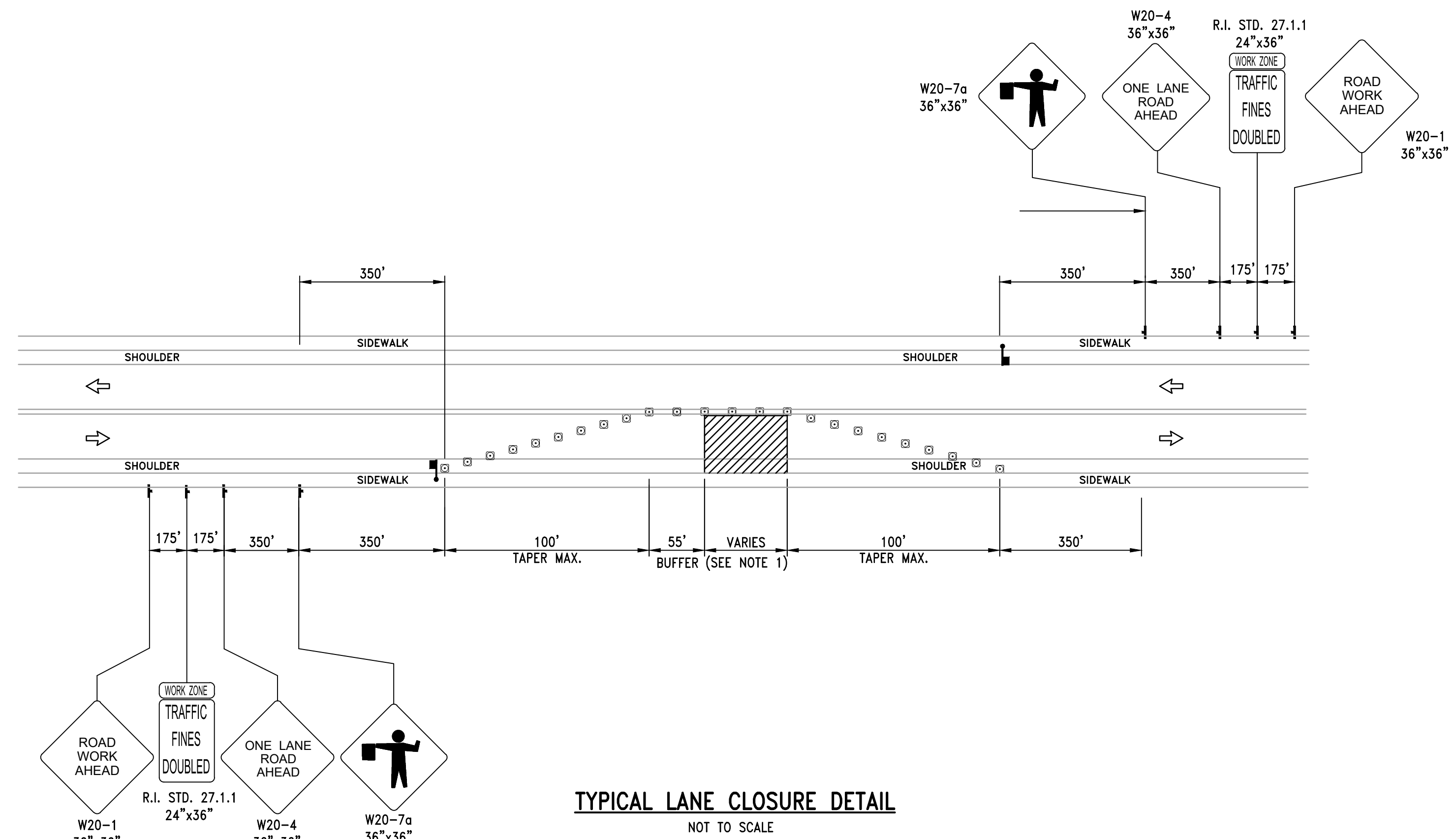
SHEET NO. 7 OF



PROJECT NO.:	22063.00
DATE:	OCTOBER 21, 2022
SCALE:	AS NOTED
DESIGNED BY:	KJS
CHECKED BY:	DH
DRAWN BY:	AWB
APPROVED BY:	LH

DRAWING NO.: C5.2

SHEET NO. 8 OF 14



NOTE:

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN NO. 1" FOR NOTES AND LEGEND APPLICABLE TO THIS SHEET.



SCALE: 1" = 30'

NOTES

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN NO. 1" FOR ALL NOTES AND LEGEND APPLICABLE TO THIS SHEET.
2. ALL TRENCHES SHALL BE COVERED BY STEEL PLATING AT THE COMPLETION OF THE DAYS WORK.
3. SEE "TEMPORARY TRAFFIC CONTROL PLAN NO.4" FOR RELOCATION OF PCMS-B.
4. NOTRE DAME AVENUE SHALL BE OPENED TO TWO WAY TRAFFIC AT THE COMPLETION OF EACH WORK DAY.

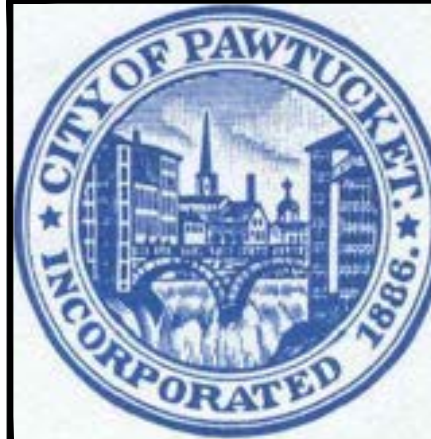


SCALE ADJUSTMENT GUIDE

0" 1"

BAR IS ONE INCH ON ORIGINAL DRAWING

PROSPECT HEIGHTS SEWER RECONSTRUCTION
Beverage Hill Avenue
Pawtucket, Rhode Island



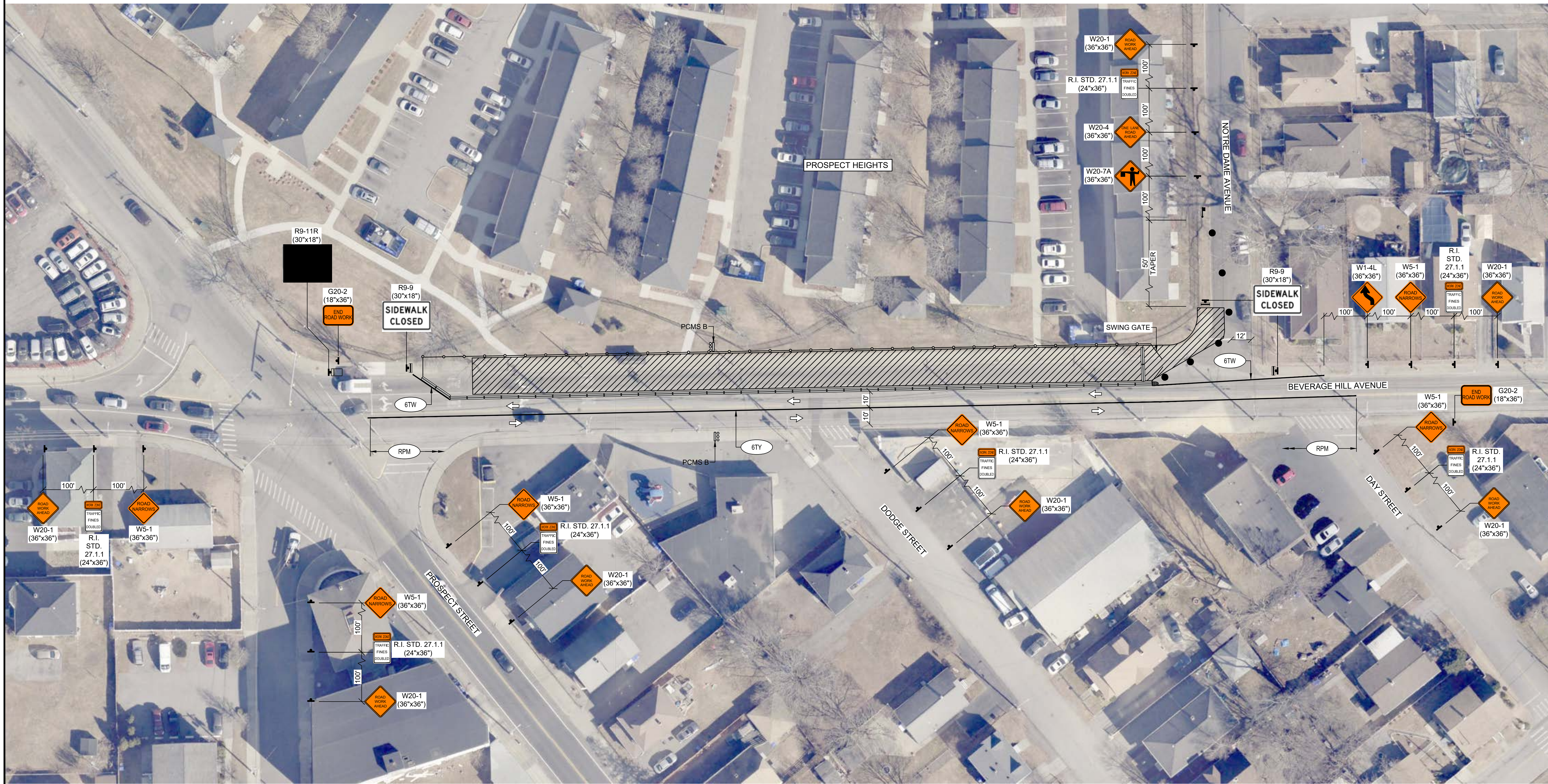
REVISIONS:

PROJECT NO.:	22063.00
DATE:	OCTOBER 21, 2022
SCALE:	1" = 20'
DESIGNED BY:	KJS
CHECKED BY:	DH
DRAWN BY:	AWB
APPROVED BY:	LH
DRAWING TITLE:	

TEMPORARY TRAFFIC
CONTROL PLAN NO. 3

DRAWING NO.:
C5.3

SHEET NO. 10 OF 14



Scale: 1"=30'



PROSPECT HEIGHTS SEWER RECONSTRUCTION
Beverage Hill Avenue
Pawtucket, Rhode Island



REVISIONS:

PROJECT NO.: 22063.00
DATE: OCTOBER 21, 2022
SCALE: 1" = 20'
DESIGNED BY: KJS
CHECKED BY: DH
DRAWN BY: AWB
APPROVED BY: LH
DRAWING TITLE:

TEMPORARY TRAFFIC CONTROL PLAN NO. 4

DRAWING NO.:
C5.4
SHEET NO. 11 OF 14

DETOUR SIGN SCHEDULE

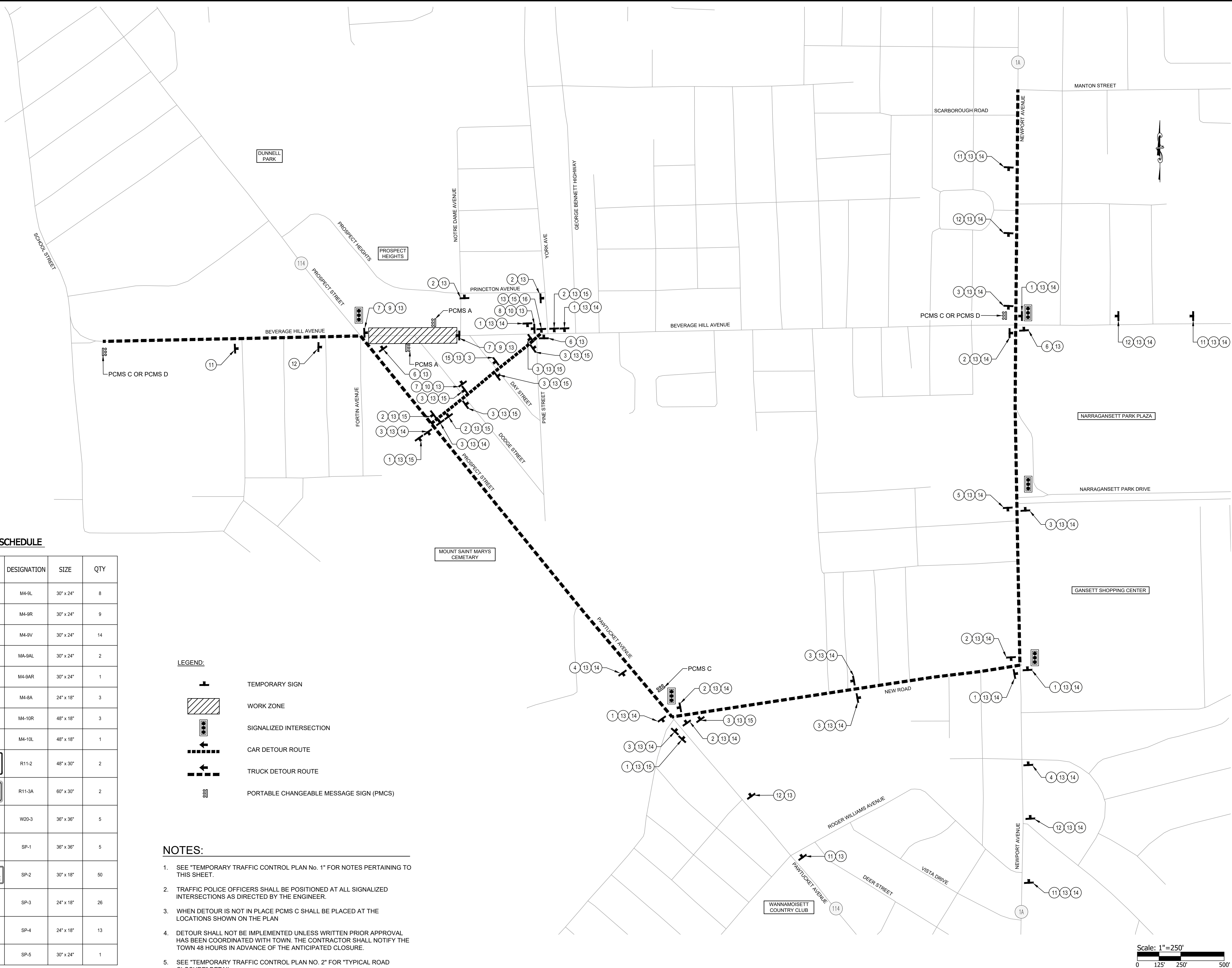
SYM.	LEGEND	DESIGNATION	SIZE	QTY
1	DETOUR	M4-9L	30" x 24"	8
2	DETOUR	M4-9R	30" x 24"	9
3	DETOUR	M4-9V	30" x 24"	14
4	DETOUR	MA-9AL	30" x 24"	2
5	DETOUR	M4-9AR	30" x 24"	1
6	END DETOUR	M4-8A	24" x 18"	3
7	DETOUR	M4-10R	48" x 18"	3
8	DETOUR	M4-10L	48" x 18"	1
9	ROAD CLOSED	R11-2	48" x 30"	2
10	ROAD CLOSED AHEAD	R11-3A	60" x 30"	2
11	ROAD CLOSED AHEAD	W20-3	36" x 36"	5
12	FOLLOW DETOUR	SP-1	36" x 36"	5
13	BEVERAGE HILL AVENUE	SP-2	30" x 18"	50
14	TRUCKS	SP-3	24" x 18"	26
15	CARS	SP-4	24" x 18"	13
16	DETOUR	SP-5	30" x 24"	1

LEGEND:

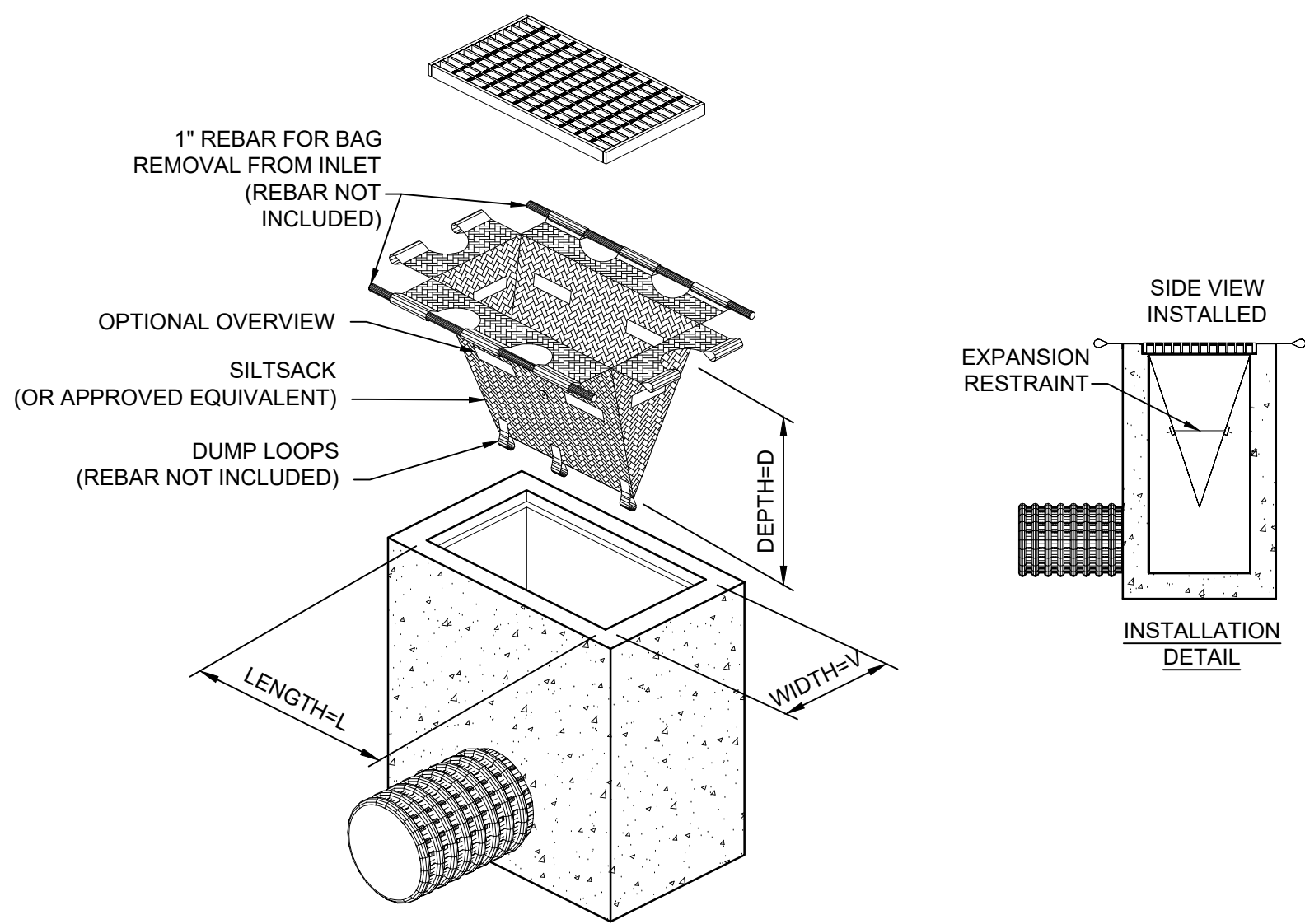
	TEMPORARY SIGN
	WORK ZONE
	SIGNALIZED INTERSECTION
	CAR DETOUR ROUTE
	TRUCK DETOUR ROUTE
	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

NOTES:

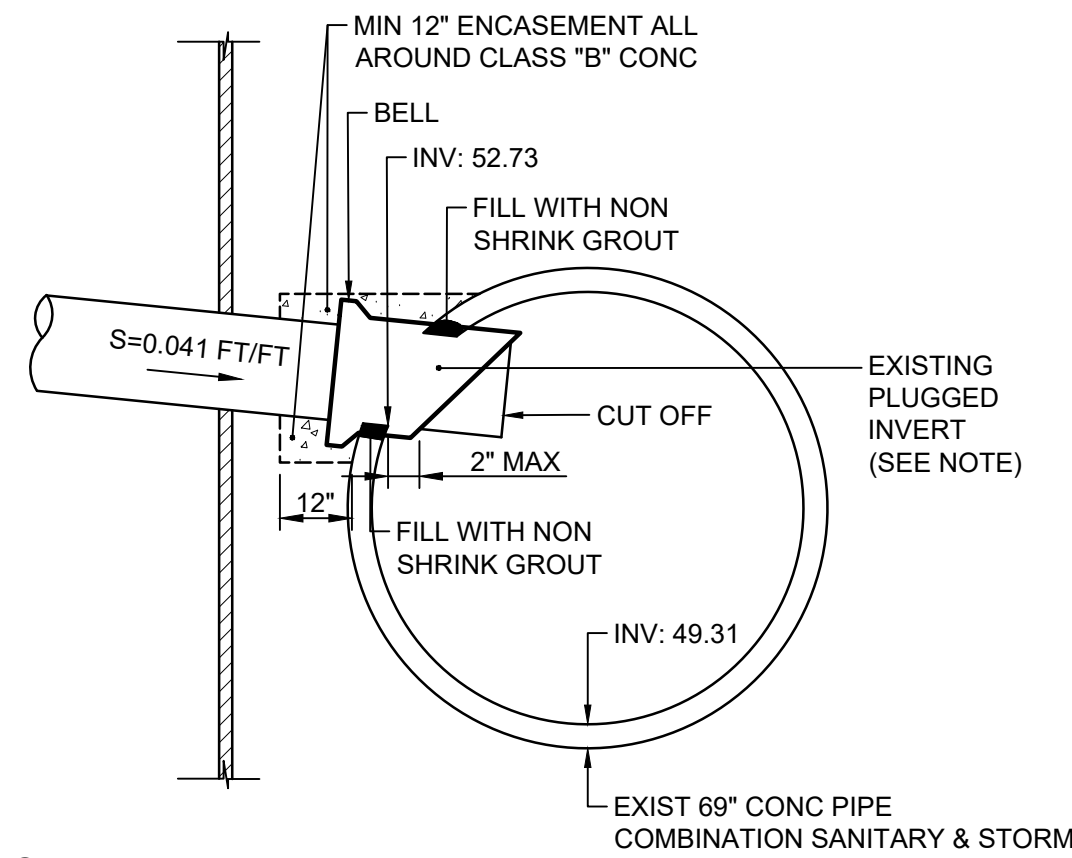
- SEE "TEMPORARY TRAFFIC CONTROL PLAN NO. 1" FOR NOTES PERTAINING TO THIS SHEET.
- TRAFFIC POLICE OFFICERS SHALL BE POSITIONED AT ALL SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- WHEN DETOUR IS NOT IN PLACE PCMS C SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE PLAN
- DETOUR SHALL NOT BE IMPLEMENTED UNLESS WRITTEN PRIOR APPROVAL HAS BEEN COORDINATED WITH TOWN. THE CONTRACTOR SHALL NOTIFY THE TOWN 48 HOURS IN ADVANCE OF THE ANTICIPATED CLOSURE.
- SEE "TEMPORARY TRAFFIC CONTROL PLAN NO. 2" FOR "TYPICAL ROAD CLOSURE" DETAIL.



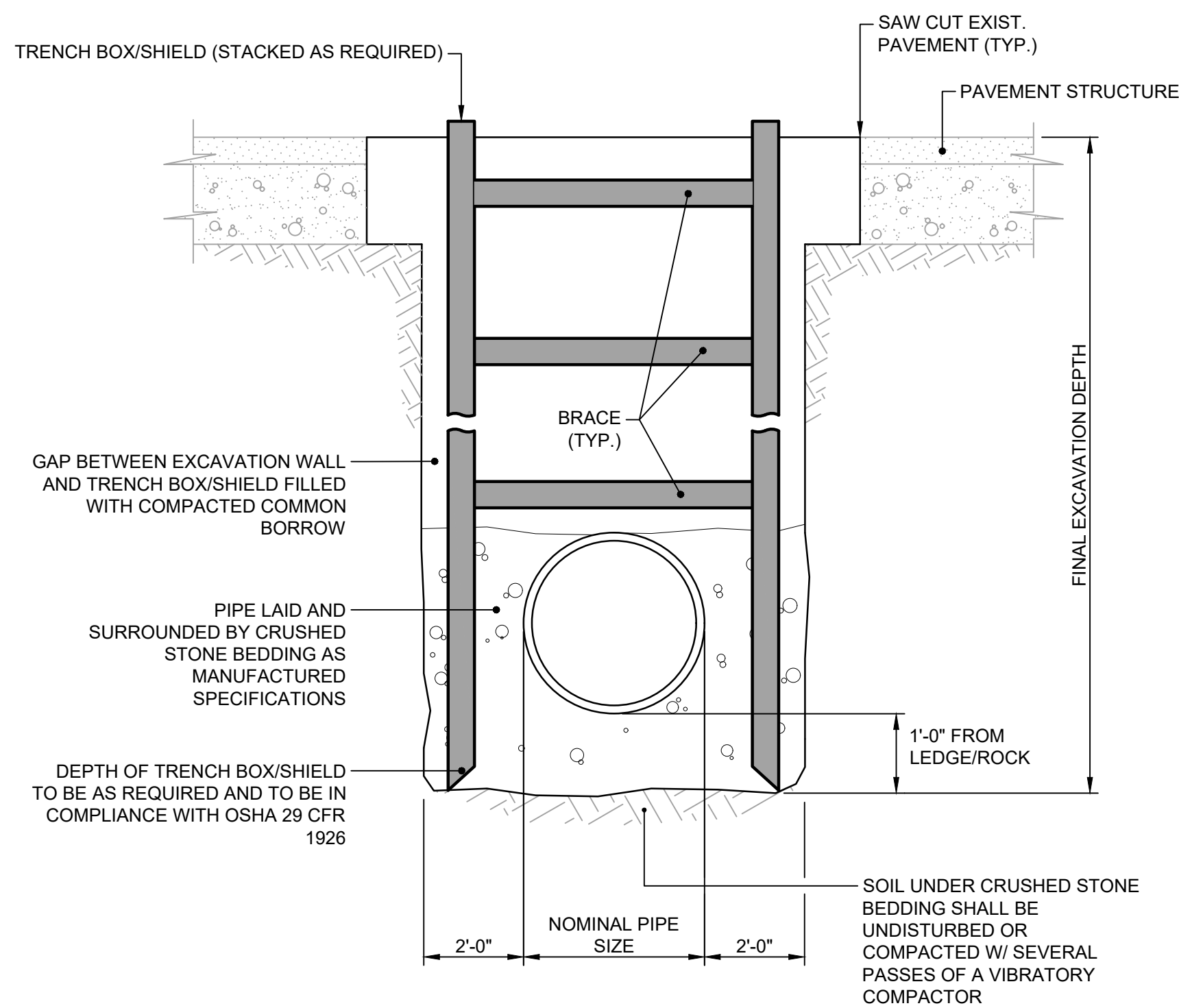
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0 125' 250' 500'



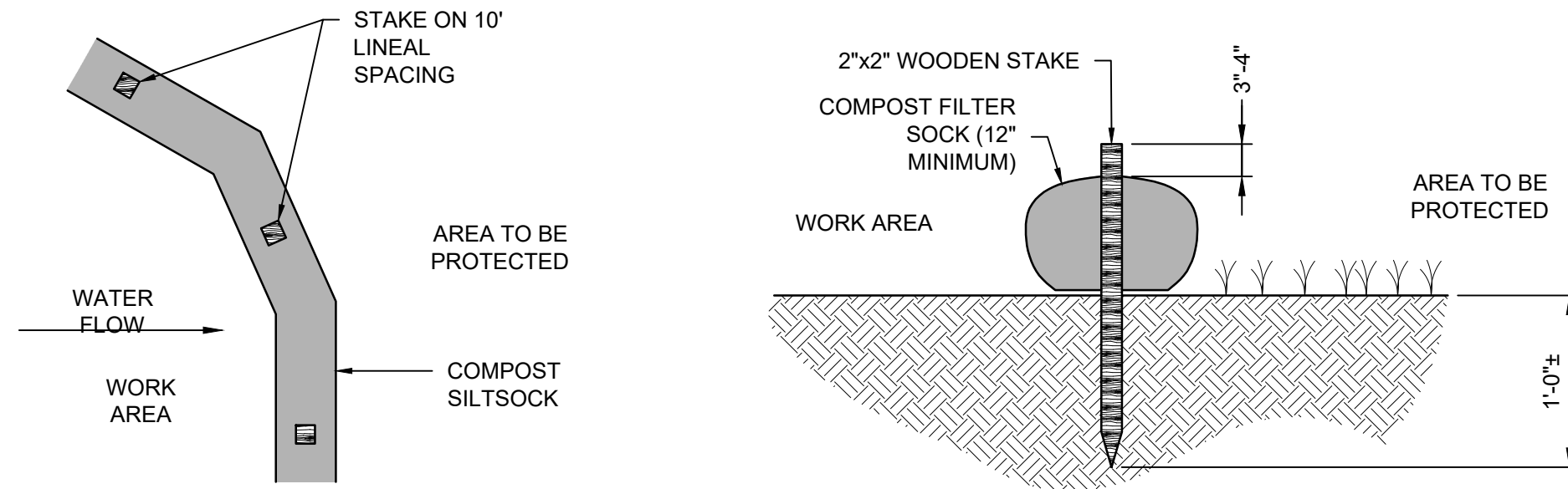
TEMPORARY INLET PROTECTION
NOT TO SCALE



CONNECTION TO EXISTING SEWER DETAIL
NOT TO SCALE

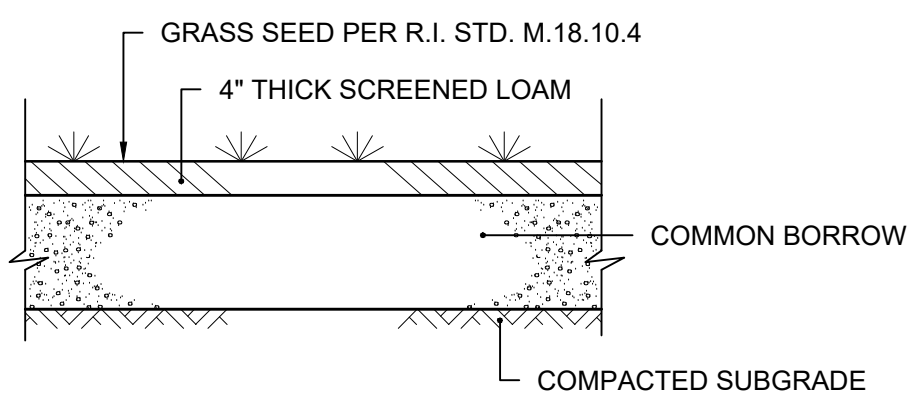


TRENCH BOX/SHIELD DETAIL
NOT TO SCALE

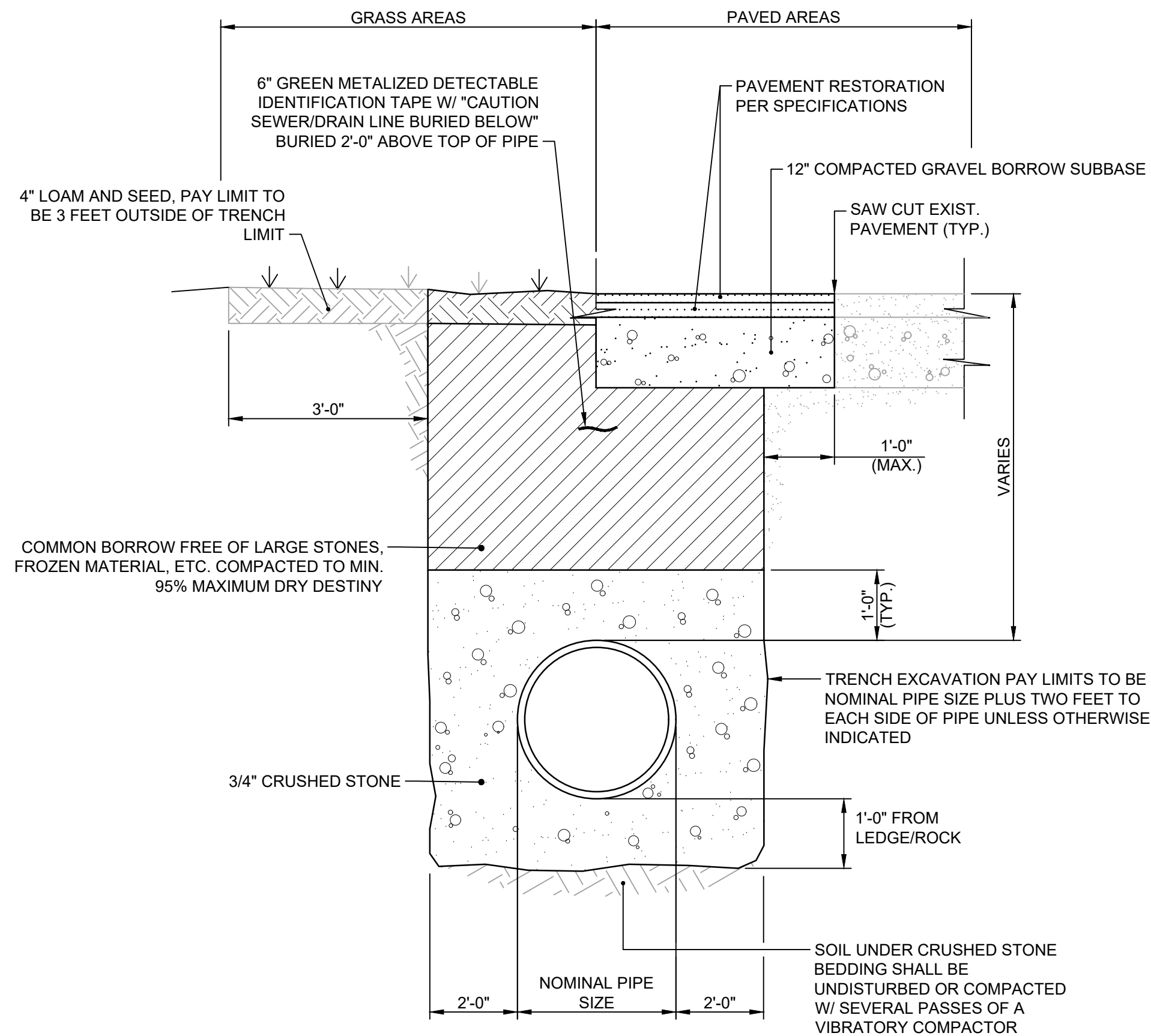


- NOTES:
- COMPOST/ SOIL/ ROCK/ SEED FILL TO MEET APPLICATION REQUIREMENTS.
 - COMPOST MATERIAL TO BE REMOVED OR DISPERSED ON SITE AS DETERMINED BY ENGINEER.
 - IF SOCK NETTING MUST BE JOINED, FIT BEGINNING OF NEW SOCK OVER END OF OLD SOCK, OVERLAPPING BY 2 FEET AND STACK OVERLAP. IF SOCK NETTING IS NOT JOINED, OVERLAP OLD SOCK WITH NEW ONE BY MINIMUM OF 2 FEET.

COMPOST FILTER SOCK DETAIL
NOT TO SCALE

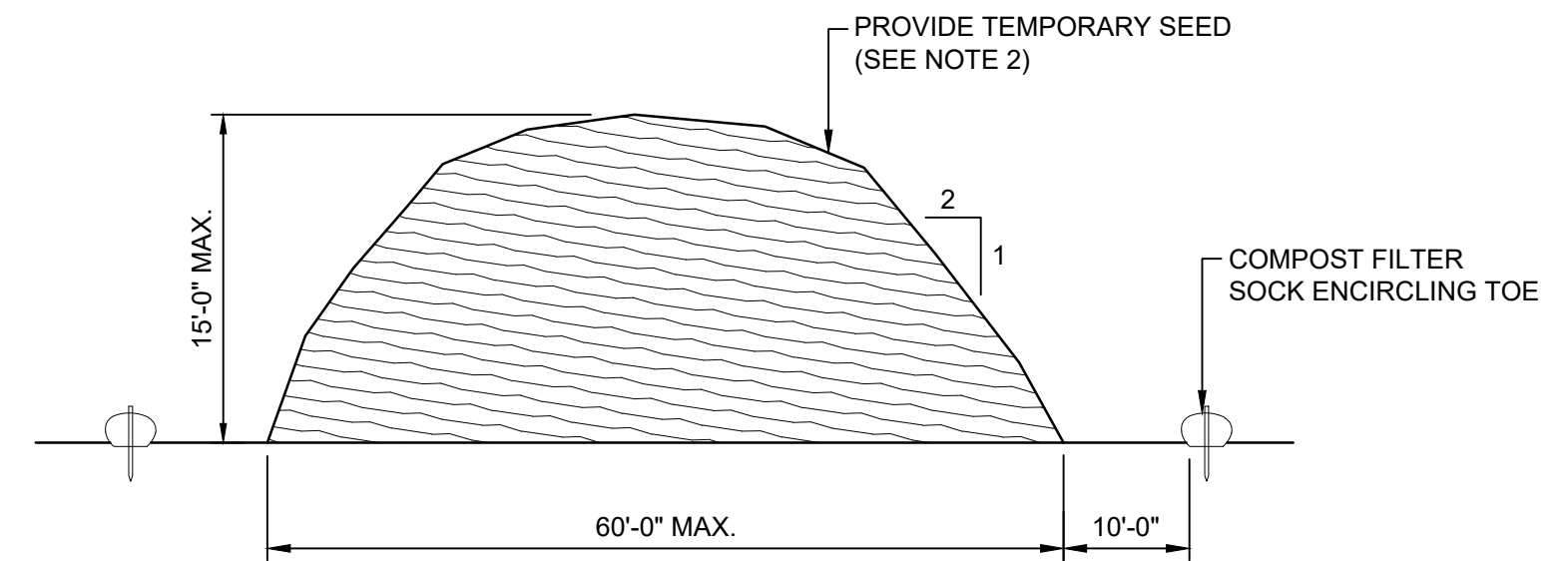


LOAM & SEED DETAIL
NOT TO SCALE



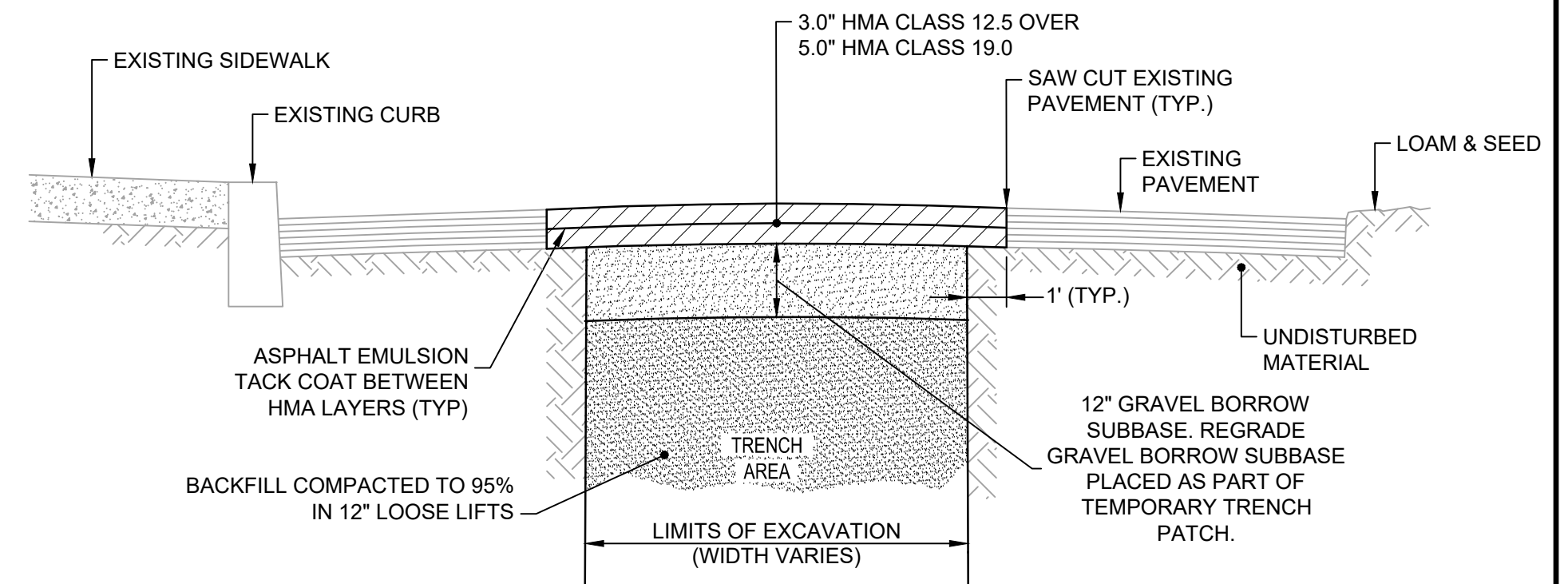
- NOTE:
- ACTUAL TRENCH WIDTH TO BE DETERMINED BY THE CONTRACTOR. EXCAVATION SHALL BE SUPPORTED WITH OSHA COMPLIANT TRENCH SUPPORT(S). PAYMENT LIMITS SHALL BE AS DESCRIBED ABOVE, AND AS INDICATED IN THE CONTRACT DOCUMENTS. CONTRACTOR SHALL ADJUST BID PRICES FOR TRENCHING AND RESTORATION ACCORDINGLY SHOULD A WIDER TRENCH WIDTH BE USED.
 - PAYMENT LIMITS FOR TRENCHES 12 FEET AND DEEPER WILL BE BASED ON THE TRENCH WIDTH BUT NOT TO EXCEED 8 FEET WIDE. CONTRACTOR MAY OPEN A WIDER TRENCH DUE TO THEIR MEANS AND METHODS BUT PAYMENT BEYOND 8 FEET WIDE WILL NOT BE PERMITTED.

TRENCH DETAIL
NOT TO SCALE



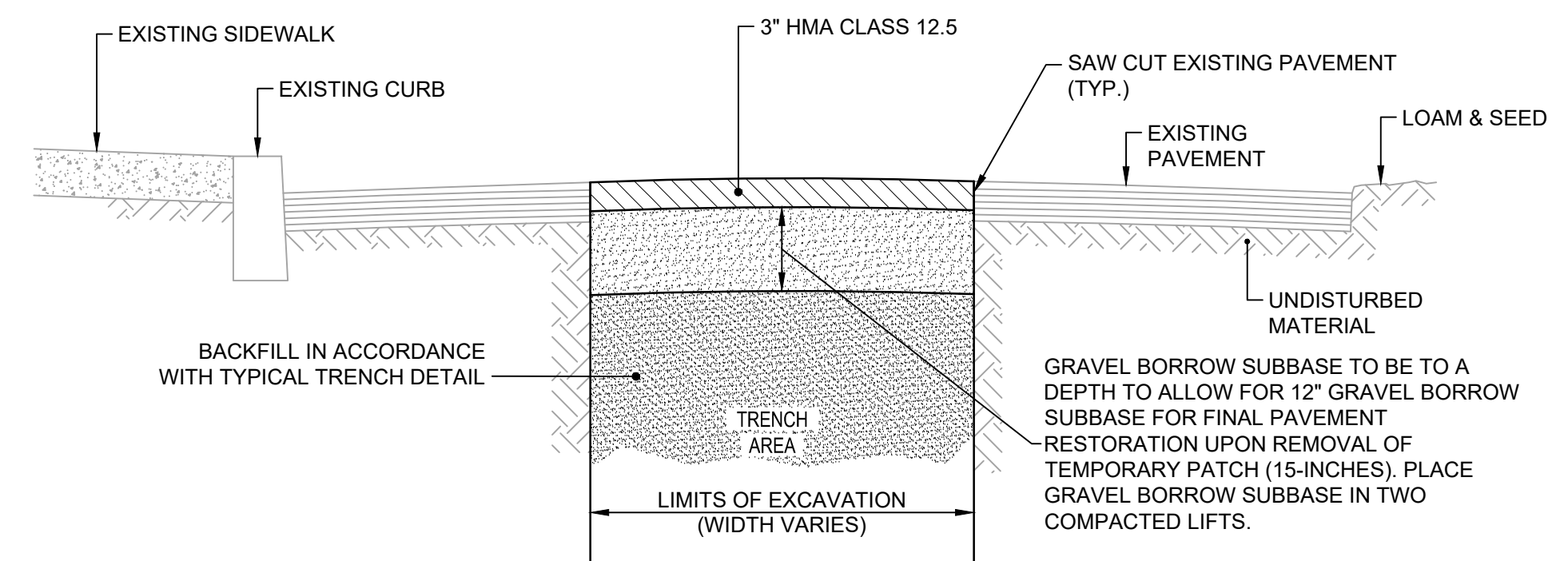
- NOTES:
- STOCKPILE AREA SHALL NOT EXCEED SPECIFIED DIMENSIONS WITHOUT APPROVAL FROM ENGINEER.
 - STOCKPILED ERODIBLE MATERIAL THAT WILL NOT BE USED FOR GREATER THAN 14 DAYS SHALL BE STABILIZED WITH TEMPORARY SEED IMMEDIATELY FOLLOWING PLACEMENT. USE RIDOT STD. M.18.10.5 SEED MIX.

ERODIBLE MATERIAL STOCKPILE
NOT TO SCALE



- NOTES:
- RATE OF SLOPE TO MATCH EXISTING TOWARDS EDGE OF PAVEMENT.
 - PAVEMENT THICKNESS TO MATCH EXISTING CONDITIONS.

PERMANENT TRENCH PATCH DETAIL
NOT TO SCALE

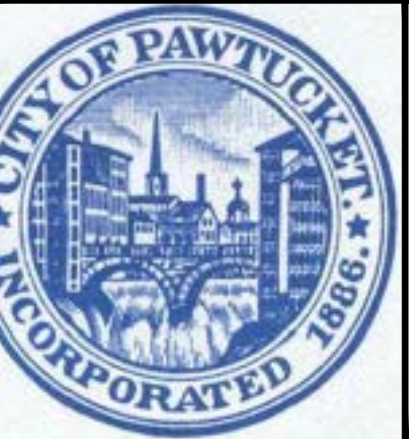


TEMPORARY TRENCH PATCH DETAIL
NOT TO SCALE



SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

PROSPECT HEIGHTS SEWER RECONSTRUCTION
Beverage Hill Avenue
Pawtucket, Rhode Island



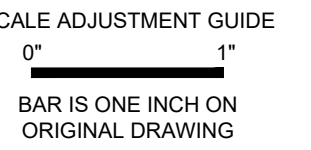
REVISIONS:

PROJECT NO.: 22063.00
DATE: OCTOBER 21, 2022
SCALE: AS NOTED
DESIGNED BY: KJS
CHECKED BY: DH
DRAWN BY: AWB
APPROVED BY: LH
DRAWING TITLE:

DETAILS NO. 1

DRAWING NO.:
C6.1

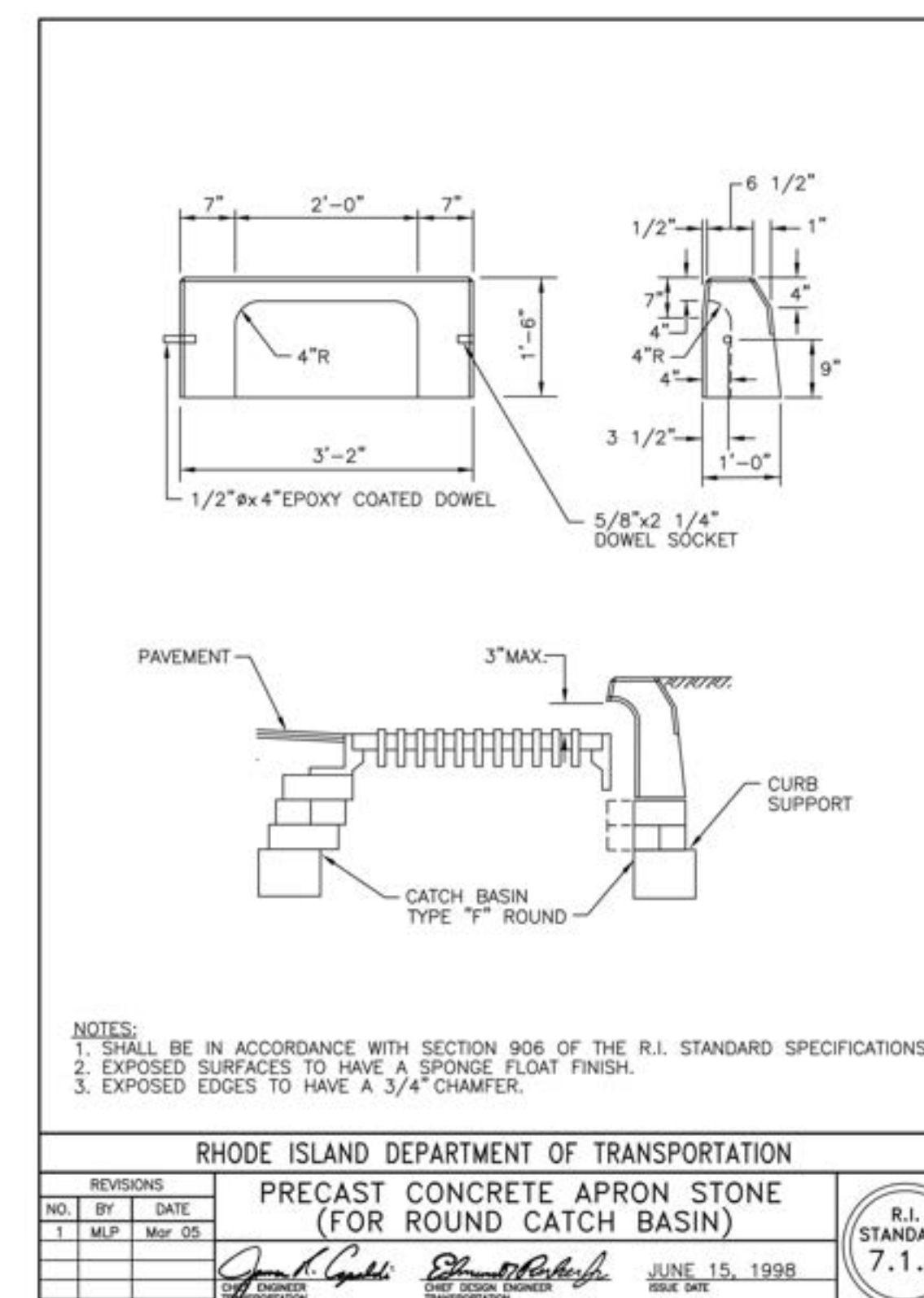
SHEET NO. 12 OF 14

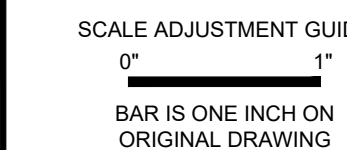


PROJECT NO.:	22063.00
DATE:	OCTOBER 21, 2022
SCALE:	AS NOTED
DESIGNED BY:	KJS
CHECKED BY:	DH
DRAWN BY:	AWB
APPROVED BY:	LH
DRAWING TITLE:	

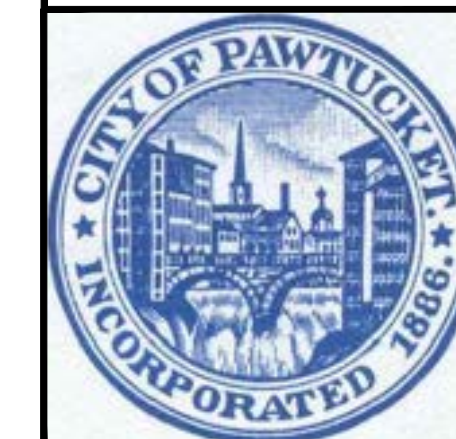
DRAWING NO.:
C6.2

SHEET NO. 13 OF 14





PROSPECT HEIGHTS SEWER RECONSTRUCTION
Beverage Hill Avenue
Pawtucket, Rhode Island



REVISIONS

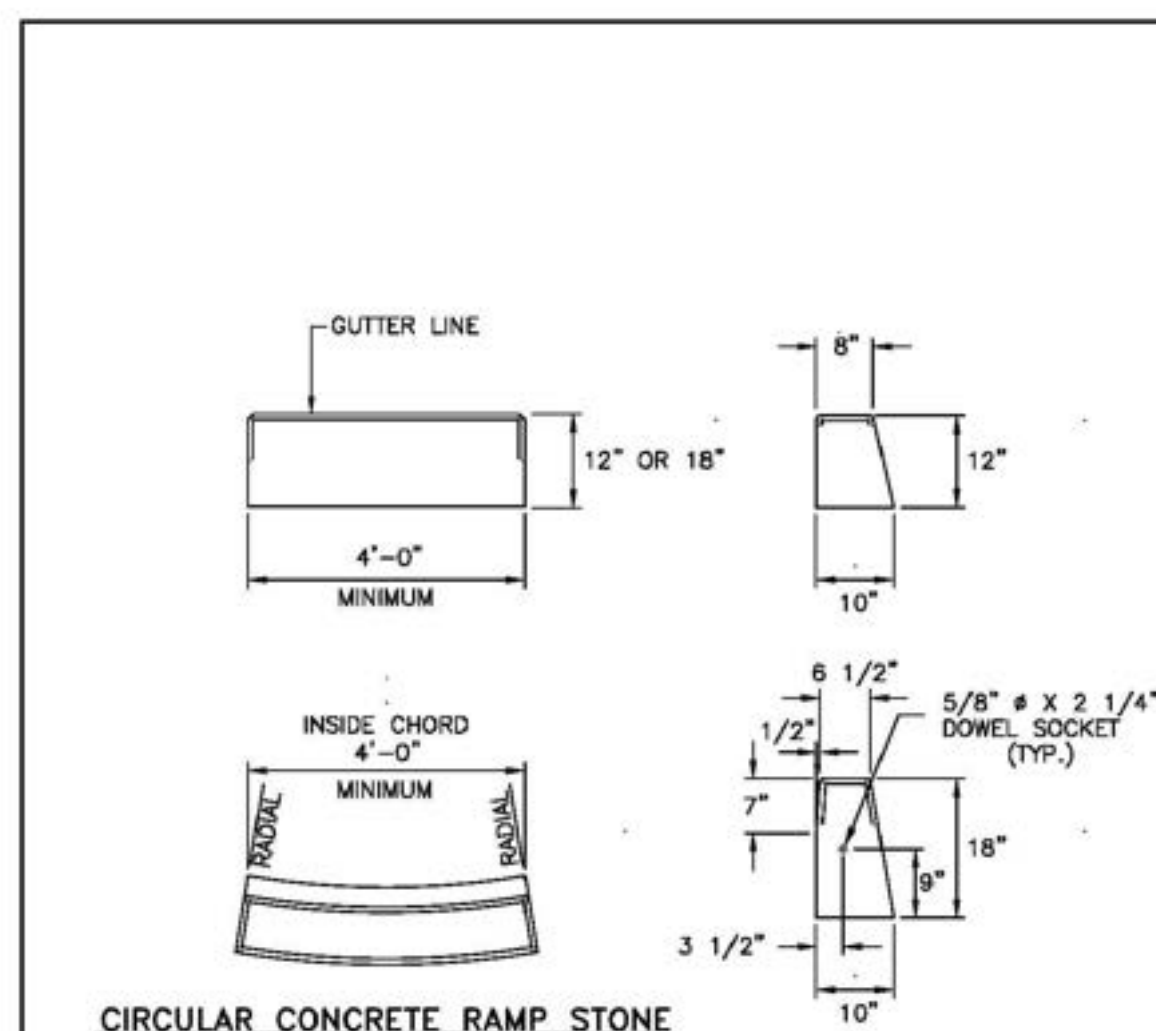
[illegible]

DETAILS NO. 3




DRAWING NO.:

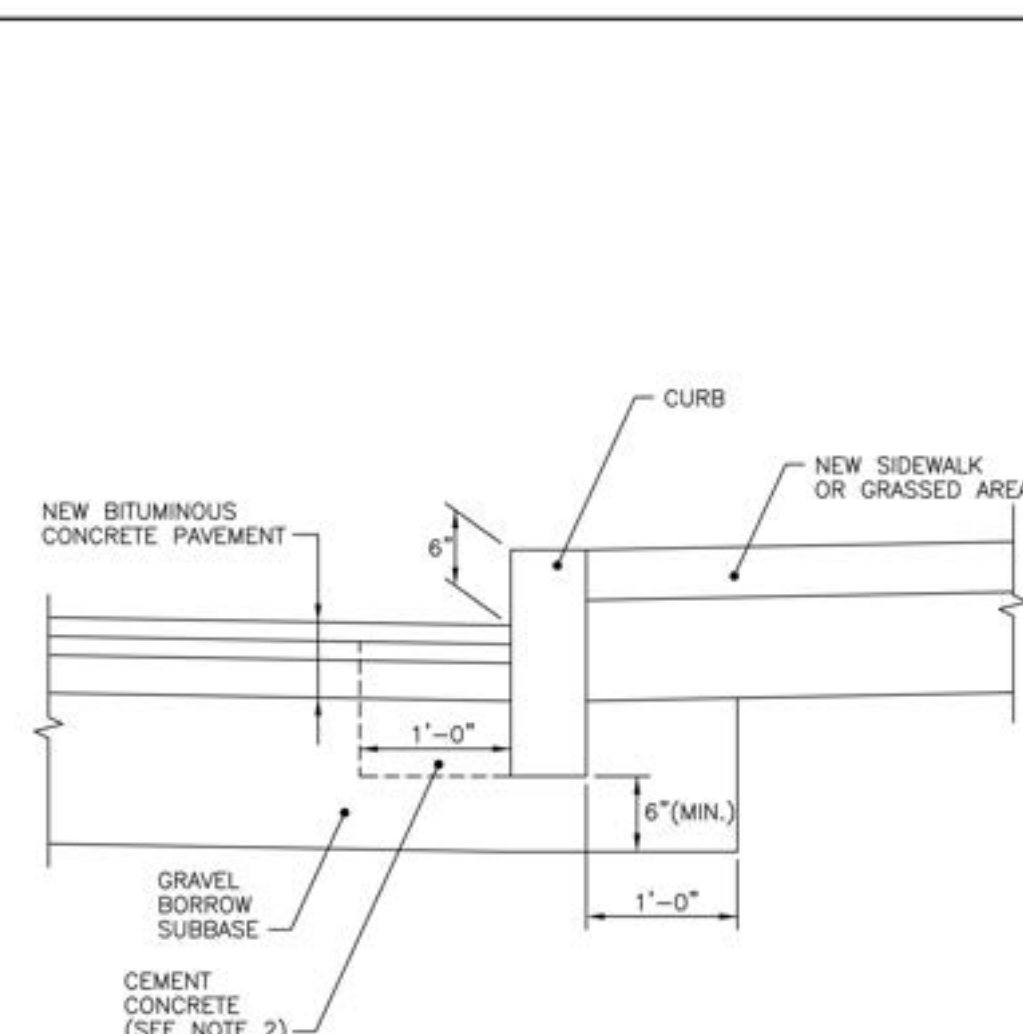
C6.3

SHEET NO. 14 OF 14





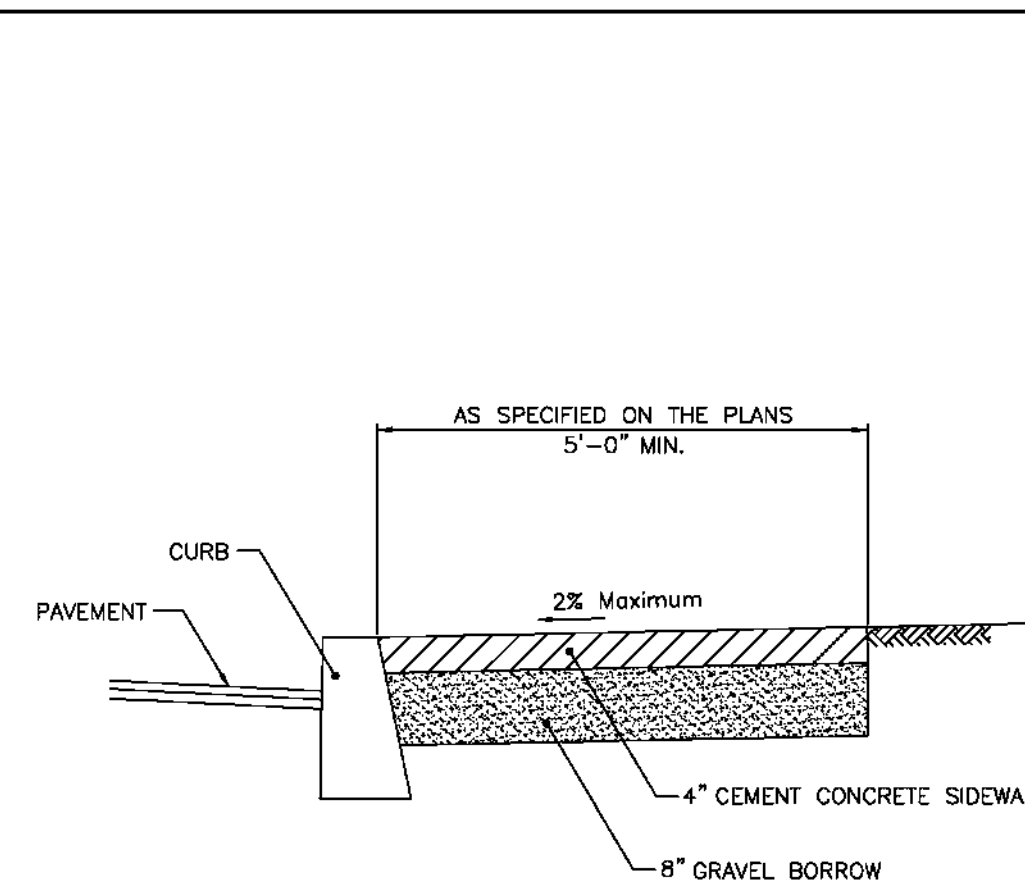
- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR RAMP STONE TO BE 4'-0".
 3. EXPOSED SURFACES TO HAVE A SPONGE FLAT FINISH.
 4. CIRCULAR RAMP STONE IS REQUIRED TO HAVE A RADIUS OF 160'-0" OR LESS. STRAIGHT RAMP STONE TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.
 5. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
 6. RAMP STONE SHALL BE SET IN ACCORDANCE WITH STD. 43.3.0.
 7. 12" RAMP STONE SHALL BE SET IN CONJUNCTION WITH STD. 7.1.2.
 8. 18" RAMP STONE SHALL BE SET IN CONJUNCTION WITH STD. 7.1.3.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION			
REVISIONS		PRECAST CONCRETE RAMP STONE	
NO.	BY DATE		
1	M.P. Sep. 2012		
		 CHIEF ENGINEER TRANSPORTATION	 CHIEF DESIGN ENGINEER JUNE 27, 2008 ISSUE DATE
			R.I. STANDARD 7.1.9



- NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. CEMENT CONCRETE SHALL BE USED ONLY WHEN THE CURB IS SET AFTER THE BASE AND/OR BINDER COURSES ARE IN PLACE, OTHERWISE THE CEMENT CONCRETE WILL BE ELIMINATED AND THE GRAVEL BROUGHT UP TO BOTTOM OF THE BASE COURSE.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION			
REVISONS		CURB SETTING DETAIL	R.I. STANDARD 7.6.0
NO.	BY DATE		
1	M.P. Mar. 05		
 JOSEPH L. GAULT ENGINEER TRANSPORTATION		 EDWARD J. BOUCHARD ENGINEER TRANSPORTATION	JUN 15, 1998 ISSUE DATE



- NOTES
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS
 2. FOR CURB SETTING DETAIL REFERENCE STD. 7.6.0.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
REVISIONS		
NO.	BY	DATE
1	MJP	3/1/95
2	MJP	06/01/0

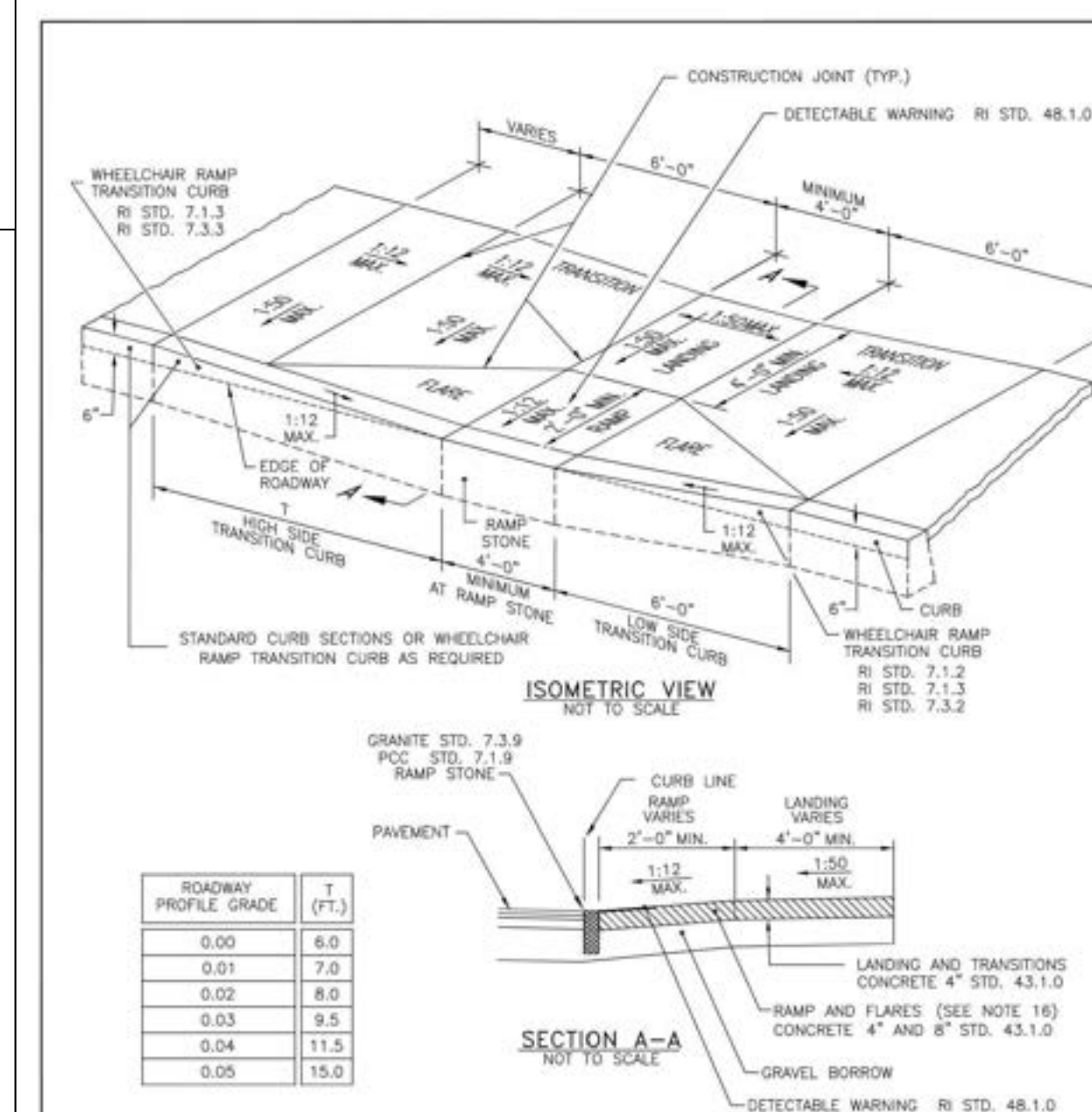
CEMENT CONCRETE SIDEWALK

[Signature]
DATE PREPARED
 06/01/00
 DEPT. OF TRANSPORTATION

[Signature]
DATE REVIEWED
 06/01/00
 DEPT. OF TRANSPORTATION

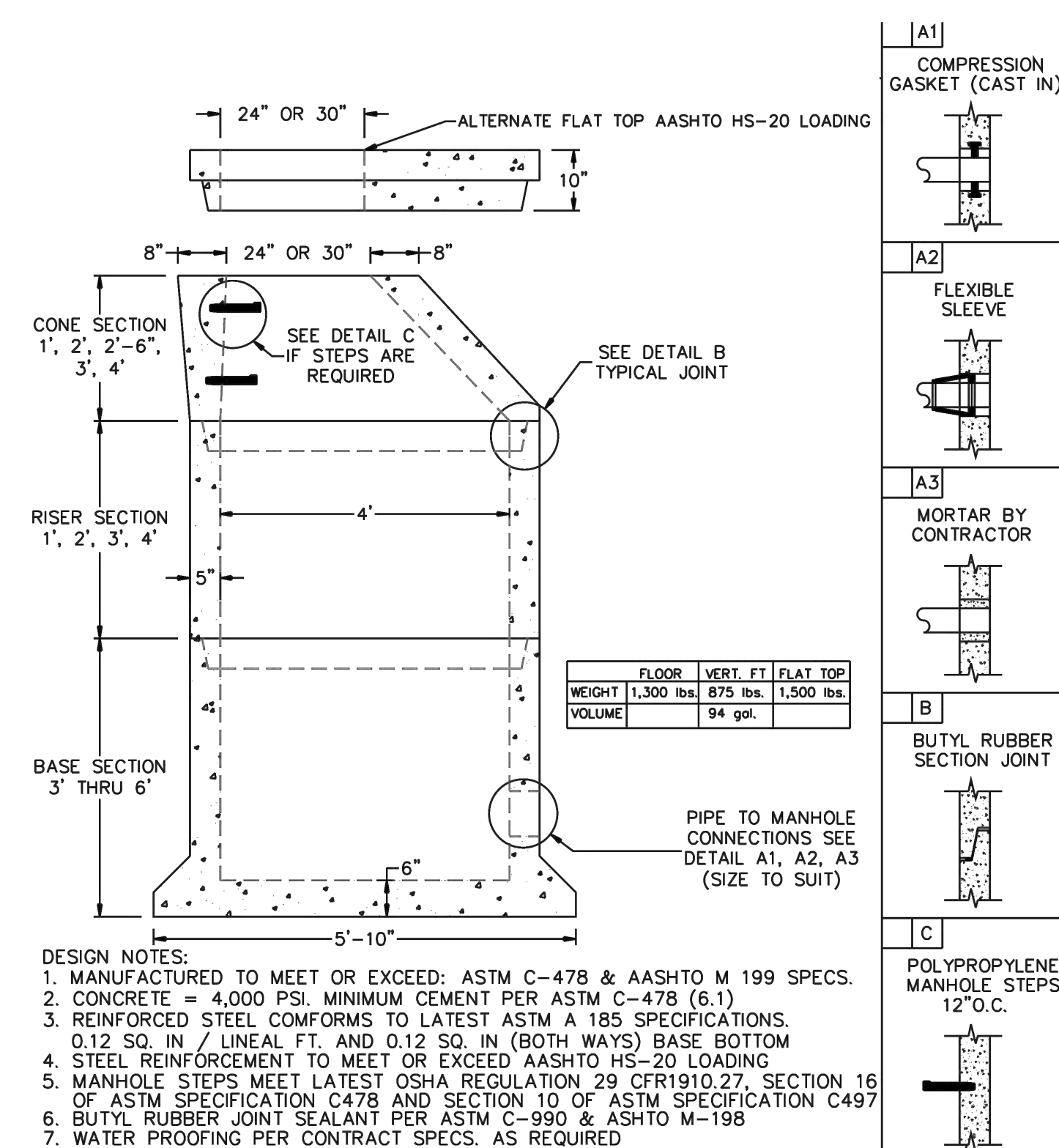
JUNE 15, 1998
ISSUE DATE

R.I.
STANDARD
43.1.0

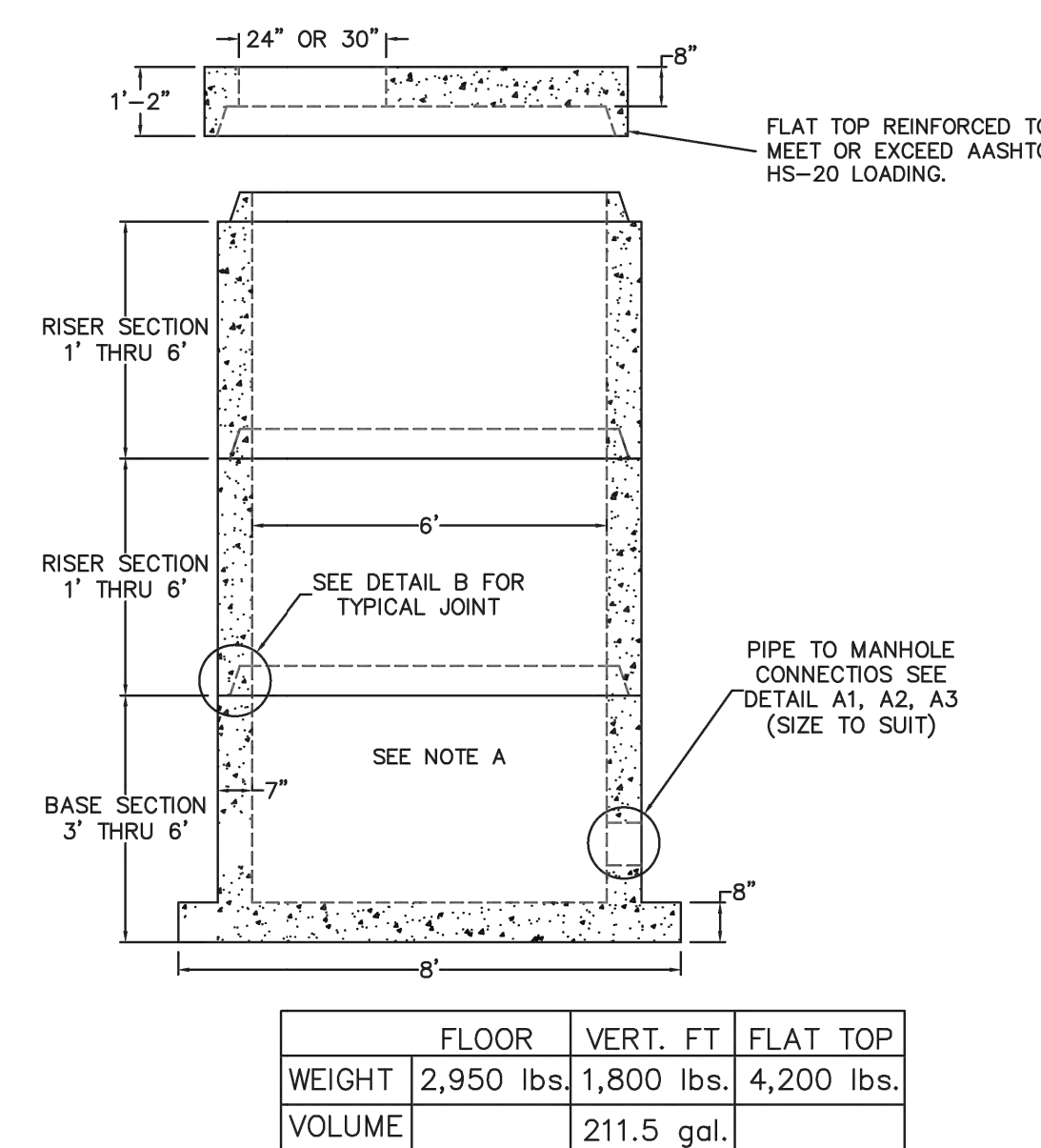


- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE RI STANDARD SPECIFICATIONS.
 2. WHEN ANY OBSTRUCTION EXISTED IN THE SIDEWALK RAMP WITHIN A CROSSWALK, THE WHEELCHAIR RAMP SHALL BE PLACED SUCH THAT THE OBSTRUCTION FALLS OUTSIDE OF THE RAMP.
 3. WHEN NO OBSTRUCTIONS ARE PRESENT, THE WHEELCHAIR RAMP SHALL BE LOCATED OUTSIDE OF THE CROSSWALK, AND IT IS TO BE CENTERED WHENEVER POSSIBLE.
 4. DRAINAGE FACILITIES ARE TO BE LOCATED UP-GRADE OF ALL WHEELCHAIR RAMPS.
 5. LOCATION OF WHEELCHAIR RAMPS IS AS SHOWN ON CONTRACT DRAWINGS.
 6. DRAINAGE FACILITIES SHALL BE INSTALLED CROSS GRADE AT LEAST 18" DOWN THE RAMP AREA.
 7. AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 4' MUST BE MAINTAINED.
 8. WHERE THE SLOPE OF THE RAMP EXCEEDS 1:12, THE MAXIMUM LENGTH OF THE RAMP SHALL NOT BE MORE THAN 1:12. HOWEVER, THE SLOPE MAY BE FLATTER IF THE DISTANCE BETWEEN THE CURB AND THE OBSTRUCTION IS LESS THAN 1:12.
 9. WHERE THE ROAD PROFILE EXCEEDS ONE HIGH SIDE TRANSITION LENGTH (7') SHALL BE EIGHTEEN FEET (18'-0").
 10. WHERE THE ROAD PROFILE EXCEEDS TWO HIGH SIDE TRANSITION LENGTHS (14'-0") SHALL BE THIRTY FEET (30'-0").
 11. THE ENTRANCE OF THE WHEELCHAIR RAMP SHALL BE FLUSH WITH THE ROADWAY.
 12. THE WHEELCHAIR RAMP SHALL BE CONCRETE OR EQUIVALENT MATERIAL WHEN POSSIBLE.
 13. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FLOOR PICES TO BE 3'-0" (GREATER LENGTHS PREFERRED).
 14. DETECTABLE CHANGES IN SURFACE SHALL BE IN ACCORD WITH SECTION 942 OF THE RI STANDARD SPECIFICATIONS.
 15. DETECTABLE WARNING SIGNS TO BE PAID FOR UNDER SECTION 942 OF THE RI STANDARD SPECIFICATIONS.
 16. DETECTABLE WARNING SIGNS TO BE PAID FOR UNDER SECTION 942 OF THE RI STANDARD SPECIFICATIONS (LOCATIONS TO BE INDICATED BY THE DESIGNER)

RHODE ISLAND DEPARTMENT OF TRANSPORTATION			
REVISIONS		WHEELCHAIR RAMP	<div style="border: 1px solid black; padding: 5px; text-align: center;">R.I. STANDARD 43.3</div>
NO.	BY		
1	MBP	Oct. 2005	<div style="display: flex; justify-content: space-between; align-items: center;"><div style="text-align: center;"> <small>JOHN G. GAGLIARDI</small> <small>CHIEF DESIGN ENGINEER</small></div><div style="text-align: center;"> <small>JOHN P. BIELE</small> <small>CHIEF DESIGN ENGINEER</small></div><div style="text-align: center;"><small>JUNE 15, 1998</small> <small>ISSUE DATE</small></div></div>
2	MBP	Jan. 2008	
3	MBP	Sep. 2012	

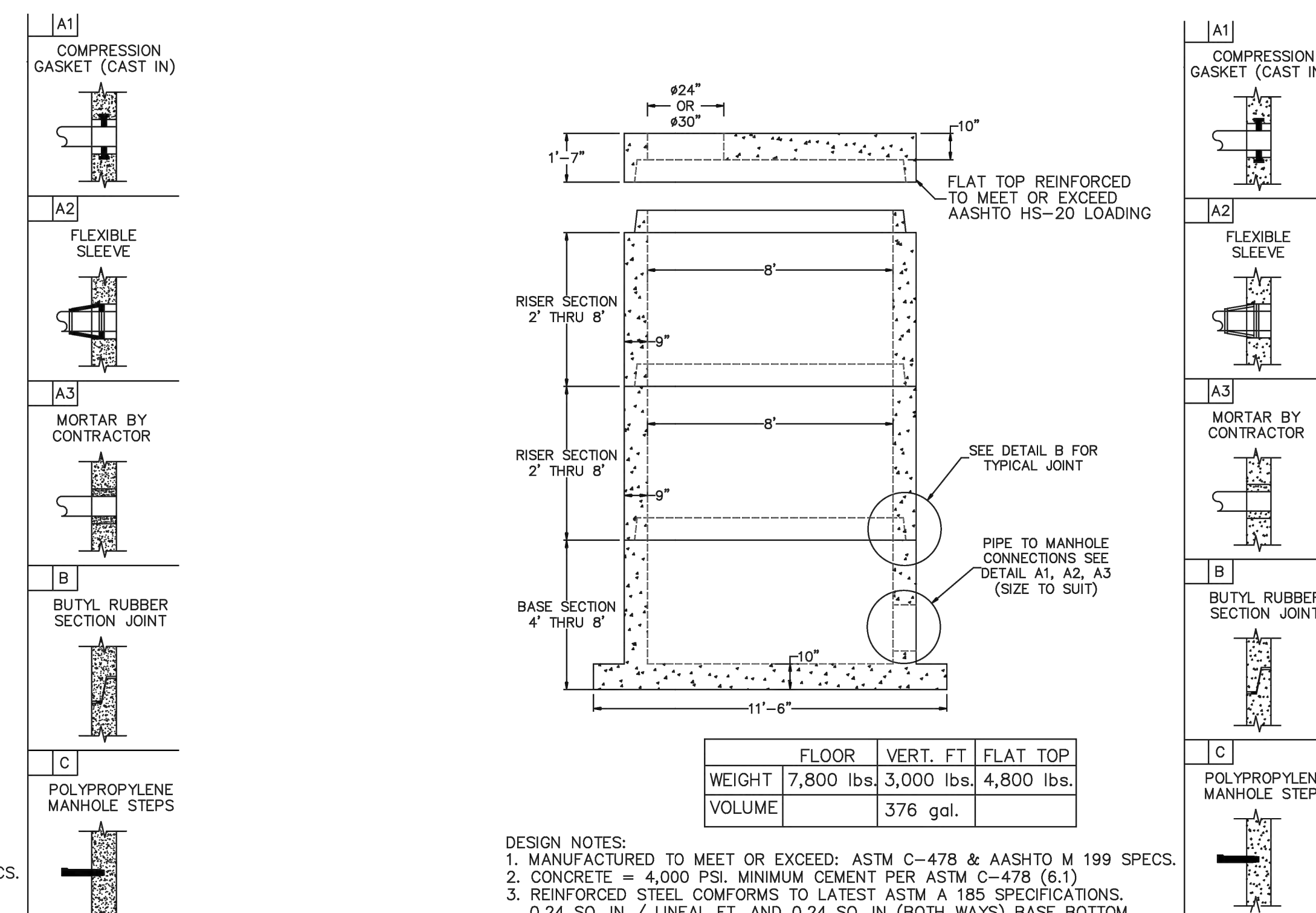


PRECAST 4'-0" ROUND MANHOLE (DEPTH GREATER THAN 12'-0")



- DESIGN NOTES:
1. MANUFACTURED TO MEET OR EXCEED: ASTM C-478 & ASHTO M 199 SPECS.
 2. CONCRETE = 4,000 PSI. MINIMUM CEMENT PER ASTM C-478 (6.1)
 3. REINFORCED STEEL COMPLIANTS TO LATEST ASTM A 185 SPECIFICATIONS.
 4. 10.8 SQ. IN. LINEAL FT. AND 0.18 SQ. IN. (BOTH WAYS) BASE BOTTOM
 5. 10.8 SQ. IN. REINFORCING TO MEET OR EXCEED: ASTM H-21, MODIFIED
 6. MANHOLE STEPS MEET LATEST OSHA REGULATION 29 CFR1910.27, SECTION 16
 7. OF ASTM SPECIFICATION C478 AND SECTION 10 OF ASTM SPECIFICATION C497
 8. OF ASTM SPECIFICATION C478 AND SECTION 10 OF ASTM SPECIFICATION C497
 9. OF FOUR MONOLITHIC BASE
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 100. OF FOUR MONOLITHIC BASE

PRECAST 6'-0" ROUND MANHOLE (DEPTH GREATER THAN 12'-0")



- DESIGN NOTES:
1. MANUFACTURED TO MEET OR EXCEED: ASTM C-478 & AASHTO M 199 SPECS.
 2. CONCRETE = 4,000 PSI. MINIMUM CEMENT PER ASTM C-478 (6.1)
 3. REINFORCED STEEL COMPLIES TO LATEST ASTM A 185 SPECIFICATIONS.
0.24 SQ. IN. LINEAL FT. AND 0.24 SQ. IN. (BOTH WAYS) BASE BOTTOM
 4. S. REINFORCING BARS TO MEET OR EXCEED ASTM A-478
 5. MANHOLE STEPS MEET LATEST OSHA REGULATION 29 CFR1910.27, SECTION 16
OF ASTM SPECIFICATION C478 AND SECTION 10 OF ASTM SPECIFICATION C497
 6. BUTYL RUBBER JOINT SEALANT PER ASTM C-990 & ASHTO M-198
 7. 4" MIN. THICK FOUR MASONRY

3 PRECAST 8'-0" ROUND MANHOLE (DEPTH GREATER THAN 12'-0") NOT TO SCALE

Appendix F

Technical Specifications Issued for Bid

**CONTRACT SPECIFICATIONS FOR:
PROPOSED HEIGHTS SEWER RECONSTRUCTION
PAWTUCKET, RI**



DESIGNER:

**PARE CORPORATION
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
Project No. 22063.00**

DATE: October 21, 2022



**CITY OF PAWTUCKET
PROSPECT HEIGHTS SEWER RECONSTRUCTION**

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01200	Meetings
01400	Quality Control
01500	Temporary Facilities
01501	Temporary Controls
01510	Protection of Existing Facilities
01540	Security
01570	Traffic Regulation
01576	Policing
01600	Materials and Equipment
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02200	Earthwork
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02750	Abandonment of Existing Sewers and Drains
02763	Pipeline Cleaning
02764	Television Inspections
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02900	Landscaping
02950	As-Built Site Survey

DIVISION 1

GENERAL REQUIREMENTS

**CITY OF PAWTUCKET
PROSPECT HEIGHTS SEWER RECONSTRUCTION**

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 – GENERAL

1.1 EXTENT OF WORK

- A. Measurement. The quantities to be measured under the various items in the proposal will be those quantities of work completed in accordance with the drawings and specifications. The methods of measurement will be as stated hereinafter for the individual items.
- B. Prices. The unit or lump sum prices for all items in the schedule of prices shall be full compensation for the work of the Contractor specified and shall include the cost of furnishing all materials, labor, tools and equipment and all work and expense incidental to and necessary to complete the work in accordance with the drawings and specifications.

1.2 WORK NOT PAID FOR SEPARATELY

- A. Stripping Topsoil. Payment for stripping topsoil, including stockpiling, is included in the prices for the various Items of Work on the Bid Form and no separate payment will be made thereof.
- B. Trench Excavation. Payment for trench excavation to the depths indicated on the drawings or authorized by the Engineer for the construction of all structures, foundations, pipes, and appurtenances, including disposal of the excavated materials in fills, backfills, embankments, designated stockpiles, or as spoil as approved by the Engineer, is included in the prices for the various items of work in the Schedule of Prices and no separate payment will be made thereof.
- C. Boulder Excavation. Payment for boulder excavation less than one (1) cubic yard in size, including furnishing and installing appropriate backfill material, is included in the various items of work on the Bid Form and no separate payment will be made thereof.
- D. Filling, Backfilling, Embankment, and Disposal of Surplus Materials. Payment for filling; backfilling for all structures, foundations, pipes, including appurtenances; construction of embankment; and disposal of surplus material is included in the prices for the various items of work on the Bid Form and no separate payment will be made thereof, unless otherwise indicated.
- E. Trimming and Fine Grading. Payment for all required trimming and fine grading, is included in the various items of work on the Bid Form and no separate payment will be made thereof.
- F. Sheeting, Shoring and Bracing. Payment for all necessary sheeting, shoring and bracing is included in the prices for the various items on the Bid Form and no separate payment shall be made thereof.
- G. Pumping, Draining and Bailing. Payment for all necessary pumping, draining, bailing, etc., including the use of underdrains or well points, is included in the prices for the various items on the Bid Form and no separate payment will be made thereof.

**CITY OF PAWTUCKET
PROSPECT HEIGHTS SEWER RECONSTRUCTION**

- H. Preparation of Site. Payment for preparation of site is included in the Lump Sum Price for Bid Item 1 – Mobilization and Demobilization in the Schedule of Prices and no separate payment will be made thereof. Preparation of site includes setting up construction plant(s), offices, shops, storage areas, sanitary and other facilities required by the specifications or Federal, State, and Local law or regulations; grading (including furnishing and installing fill material and removal and disposal of excess material) and rock removal at the site for all temporary facilities required as part of construction; obtaining necessary permits and licenses and payment of fees; general protection, temporary heat and utilities; providing shop and working drawings, certificates and schedules; sampling and testing materials; providing required insurance; cleaning up; and all other work regardless of its nature which may not be specifically referred to on the Bid Form but is necessary for the complete construction of the project set forth by the contract.
- I. Water or Calcium Chloride for Dust Control. Payment for work under this Section is included in the prices for the various items on the Bid Form and no separate payment will be made thereof.
- J. Bonds. Payment for bonds required by the contract is included in the prices bid for the various items of work on the Bid Form and no separate payment will be made thereof.
- K. Environmental Protection. Payment for work under this Section is included in the prices for the various Items on the Bid Form and no separate payment will be made thereof.
- J. No separate payments will be made for cleaning up. Such clean-up shall be considered incidental to the item to which it applies and shall be included in the price for that item. Contractor is made aware that equipment, materials, and construction vehicles will not be allowed to remain onsite on weekends or holidays and shall be returned to Contractor's staging area. This includes road plates when not being used to protect excavations. No separate payment will be made for hauling and transporting equipment, materials and construction vehicles to and from the site.
- K. All existing work removed or damaged by the Contractor's operations shall be replaced to the satisfaction of the Engineer at no additional expense to the Owner.
- L. No separate payment will be made for work or items associated with Division 1 - General Requirements. Contractor shall incorporate the cost for these items into the Bid Items listed on the Bid Form.
- M. No separate payment will be made for relocation, repair, or replacement of existing utilities that are damaged due to Contractor's negligence or those that are temporarily removed or relocated for Contractor's convenience. Bid items have been provided for utility relocation/replacement/repairs (e.g., storm drain replacements and sewer system replacements) proposed as part of the work as shown on the drawings or where replacement is directed by the Engineer.
- N. No separate payment shall be made for support of underground or overhead utilities. Payment for these items is included in Item No. 22- Reinforced Concrete Pipe (PCP) M 170 Class III* 12", Item No. 23- Reinforced Concrete Pipe (PCP) M 170 Class III* 15", Item No. 24- Reinforced Concrete Pipe (PCP) M 170 Class V* 24" and Item No. 26- Polyvinyl Chloride (PVC) Sewer Pipe- 24."

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PROSPECT HEIGHTS SEWER RECONSTRUCTION**

- O. No separate payment shall be made for costs associated with licensed Professional Engineer(s) performing all design calculations, which shall be sealed and signed by said Professional Engineer(s). The Contractor is called to the attention that individual sections of these contract documents indicate when design calculations are required. Design calculations performed, sealed and stamped by a licensed Professional Engineer is included in the prices for the various Items in the Schedule of Prices and no separate payment will be made thereof.
- P. Hydrostatic/Bacteriological/Testing. Payment for work under this Section is included in the prices for the various Items in the Schedule of Prices and no separate payment will be made thereof. This shall include, but is not limited to, furnishing and installing required corporations, valves, tubing, piping, fittings and any other incidentals required to successfully perform all required testing. It also includes labor and laboratory costs associated with analytical testing of samples collected. Owner and Engineer make no guarantee as to the availability of adequate pressures to perform required testing, and it shall be the contractor's responsibility to provide and operate all necessary pumping equipment for all testing purposes. Any other incidentals required to perform testing, including laboratory fees, shall not be paid for separately.
- Q. Compaction and costs associated with 3rd party compaction testing are the responsibility of the Contractor, which shall be performed for the Contractor through an approved subcontractor, are incidental to the items described. No separate payment shall be made for labor, materials, or equipment necessary to adequately compact backfilled excavations and to conduct compaction testing in accordance with the specifications.
- R. Costs associated with vacuum testing of sewer manholes and air testing of gravity sewer and drainage pipes is incidental to the items described. No separate payment shall be made for labor, materials, or equipment necessary to adequately perform testing in accordance with the specifications.

1.3 BID ITEMS

- A. Appurtenant items of work shown on the drawings or specified which are required to complete the work but are not listed separately under the various applicable bid items of work, shall have no separate payment for such items. It shall be the responsibility of the Contractor to verify any missing or incomplete items.
- B. The Owner reserves the right to remove select bid items and to increase or decrease the unit quantity of bid items. The successful bidder is made aware that the unit price so stated on the proposal form constitutes full compensation for that item, regardless of any increase or decrease in the unit quantity of that bid item. There is no guarantee of any minimum or maximum quantity for any bid item. Standards of the industry (e.g. renegotiation of the bid price due to a 25% increase or decrease in the unit quantity of the bid item) shall not be enforceable under this contract. Renegotiation of bid prices is solely at the discretion of the Owner.

1.4 MEASUREMENT

- A. The measurement of all quantities of items listed on the Bid Form shall be done by the Contractor. The measurement will include proper and complete documentation of all items to

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the satisfaction of the Owner and Engineer prior to the submission for payment. The measurement submitted shall be in the same unit description listed on the Bid Form.

1.5 PAYMENT

- A. Payments shall be made to the Contractor only after proper documentation of the unit quantity provided or percentage of work completed, and in accordance with the contract terms and conditions regarding payment.
- B. Payment for bid items shall include full compensation for all incidentals required for the complete installation of the completed product.
- C. Payment shall be made only for that work which is performed within the pay limits shown on the drawings or detailed in the specifications. No payment shall be made for work beyond these limits unless the work has been authorized by the Engineer in writing.

1.6 PARTIAL PAYMENT FOR PRODUCTS

- A. Contractor may request partial payment for Products (supplies, material and/or equipment) as defined in Section 01600, Materials and Equipment, which will be incorporated into the Work and which are delivered and stored off-site. The request may only be made when submitting Contractor's proposal for a Schedule of Values. In order for this request to be considered, the Contractor must comply with the requirements of this sub-section and the Agreement. Any payments approved pursuant to this sub-section shall not exceed sixty-five percent (65%) of the Product's invoiced value and shall be subject to retainage as set forth in the Agreement. Contractor shall obtain prior approval since the Owner reserves the right to refuse approval for payment for any equipment or materials suitably stored off-site in its sole discretion, regardless of whether all conditions contained herein have been met.
- B. Partial payment may be made for Products eligible for off-site delivery and storage only upon presentation by the Contractor of a Bill of Sale, an invoice or an Affidavit certifying that the material is received by the Owner free and clear of all liens, encumbrances and security interests of any kind and including for off-site delivery evidence acceptable to the Owner that "all risks" property insurance in an amount sufficient to protect the interests of the Owner is in effect at the approved site and that the Owner is a loss payee equal to or greater than its percentage of ownership.
- C. Partial payment for Products delivered and stored off-site shall be contingent upon Contractor's compliance with the storage and protective maintenance requirements set forth in Section 01600 and all other requirements necessary to preserve equipment warranties for the benefit of the Owner.
- D. All costs associated with delivery to and storage of equipment or material at an off-site facility shall be assumed by the Contractor notwithstanding the Contractor's request for, and obtaining approval of the Owner to so deliver and store the materials.
- E. Contractor shall provide written evidence to the Owner of having made arrangements for unrestricted access by the Owner and its authorized representatives to the materials wherever stored, including provision for the Owner to take control and possession of such materials at any time and without restriction.

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- F. Contractor must provide the Owner, upon request and prior to any partial payment, documentation that transfers absolute legal title to such material to the Owner conditional only upon receipt of final payment. Neither such transfer of this nor any partial payment shall constitute acceptance by the Owner of the materials nor void the right to reject materials subsequently found to be unsatisfactory, or in any way relieve the Contractor of any obligation arising under the Contract Documents.

1.7 EXTRA WORK

- A. Extra work, if any, shall be performed and paid for in accordance with the Contract Agreement.

1.8 BASE BID - ITEM DESCRIPTIONS

A. Item 1, Mobilization and Demobilization

1. The Work of this section shall be measured as specified at the Lump Sum price provided on the Bid Form. The payable quantity will be for the preparatory work and operations which must be performed or for costs which must be incurred prior to beginning work, final clean-up and demobilization of temporary facilities and equipment, restoration of impacted areas disturbed due to construction of all temporary facilities, preparation of red-line markups to facilitate preparation of as-built drawings, and the cost of payment and performance bonds as well as fees for all permits and Federal, State, and local approvals. Mobilization shall include, but is not limited to, movement of personnel, equipment, supplies, and incidentals to the project site for the establishment of all Contractor's utilities, temporary fencing, installation, maintenance, and removal of tracking pads, supplying, furnishing, installing and subsequent removal of steel sheeting at the end of each working day, and other facilities necessary for work on the project. Demobilization shall include, but is not limited to, moving out of personnel and equipment, cleaning entire site, and removing debris and rubbish.
2. This work shall include all necessary labor, materials and incidentals required to including the installation and subsequent removal of a temporary bypass as needed, including all pipes, pumps and other materials needed to complete the work, furnishing and installing steel plates at the end of each working day, as needed, subsequent removal of steel plates to conduct work, perform post construction CCTV inspections of all newly constructed sewer mains and drain pipes. Required deliverables shall be as described within these contract documents.
3. The payment for work associated with site mobilization and demobilization shall be a Lump Sum Price as provided on the Bid Form for Bid Item No. 1. Payment will be limited to 75% of the lump sum amount of this item until the work is complete and the contractor has completely demobilized. The initial payment of 75% mobilization cost shall be payable when the Contractor is operational on site. The lump sum price bid for this item shall not exceed 5 percent of the total of all items, excluding this item.

B. Item 2, Erosion and Sedimentation Controls

1. The work of this section shall be measured as specified at the Lump Sum price on the bid form for installation, cleaning, maintenance, removal, and disposal of erosion and sedimentation controls where shown on the drawings, as required to comply with

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applicable regulations and permits, or as otherwise required by the Owner and Engineer. Work shall include all necessary equipment, materials, workmen, and all incidental work required for completion of the work specified herein and included on the Contract Drawings and in these specifications.

2. The work of this section includes restoration of areas damaged or impacted by erosion and sedimentation resulting from Contractor's operations with no additional cost to the Owner.

C. Item 3, Traffic Control and Management

1. The work of this section shall be measured as specified at the Lump Sum price on the bid form for the installation, maintenance, protection, relocation and final removal of temporary traffic control signs, devices and pavement markings as shown in the Drawings and required by the Owner and Engineer. Work shall include all necessary labor, equipment, materials, workmen and for all incidental work required for the completion of the work specified herein and included in the Contract Drawings and in these specifications.
 2. The work shall include the replacement of any damaged traffic control devices resulting from the Contractor's operations at no additional expense to the Owner
 3. This Contractor is responsible for any costs associated with no parking signage where temporary parking bans are needed to complete the work.
 4. Flag persons are to be used to direct traffic unless the work is deemed a hazard to public safety in which the Contractor shall request the use of Police which shall be paid for under Item 56- Policing.

D. Item 4, Remove and Dispose Concrete Curb

1. The work of this section shall be measured as specified at the Linear Foot price on the bid form to remove and legally dispose concrete curbing as shown in the Drawings and/or as specified by the Engineer
2. The work shall include the removal and legal disposal of concrete curbing, including curb lock, and all labor, materials and equipment and for all incidentals required to finish the work, complete and accepted by the Engineer.
3. Saw cutting for the removal of curbing is included in other bid items under this contract.

E. Item 5, Remove and Dispose Sidewalks

1. The work of this section shall be measured as specified at the Square Yard price on the bid form to remove and legally dispose sidewalks as shown in the Drawings and/or as specified by the Engineer
2. The work shall include the removal and legal disposal of sidewalks and all labor, materials and equipment and for all incidentals required to finish the work, complete and accepted by the Engineer.
3. Saw cutting for the removal of sidewalk is included in other bid items under this contract.

F. Item 6, Remove and Dispose Flexible Pavement

1. The work of this section shall be measured as specified at the Square Yard price on the

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- bid form to remove and legally dispose of flexible pavement, including surface and base courses, as shown in the Drawings and/or as specified by the Engineer
2. The work shall include the removal and legal disposal of flexible pavement, including surface and base courses and temporary trench patches, and all labor, materials and equipment and for all incidentals required to finish the work, complete and accepted by the Engineer.
 3. Saw cutting for the removal of flexible pavement is included in other bid items under this Contract.
- G. Item 7, Cutting and Dispose Isolated Trees and Stumps (4"-24")
1. The work of this section shall be measured as specified at the EACH price on the bid form to cut, remove and legally dispose of trees and stumps in excess of 4 inches in diameter and as large as 24" in diameter (measured at 4 inches above existing ground) as shown in the Drawings and/or as directed by the Engineer.
 2. The work shall include the cutting and legal disposal of isolated trees and stumps, and all labor, materials and equipment and for all incidentals required to finish the work, complete and accepted by the Engineer.
- H. Item 8, Remove and Dispose Catch Basins
Item 9, Remove and Dispose Manholes
1. The work of this section shall be measured as specified at the EACH price on the bid form to remove, in whole or in part, drainage structures such as catch basins and manholes as shown in the Drawings and/or as directed by the Engineer.
 2. The work shall include the removal and legal disposal of catch basins and manholes, and all labor, materials and equipment and for all incidentals required to finish the work, complete and accepted by the Engineer.
 3. Removing and disposing frame and grates or frame and covers is included in other bid items under this Contract.
- I. Item 10, Remove and Dispose Pipes- All Types and Sizes
1. The work of this section shall be measured as specified at the LINEAR FOOT price on the bid form to remove all pipe of whatever nature and sizes as shown in the Drawings and/or as directed by the Engineer.
 2. The work shall include the removal and legal disposal of pipes as shown in the Drawings, and all labor, including cutting pipes to be removed or abandoned, materials and equipment and for all incidentals required to finish the work, complete and accepted by the Engineer.
 3. Plugging and capping of abandoned drain or sewer pipes is included in other bid items under this contract.
- J. Item 11, Remove and Dispose Frame and Grate or Frame and Cover
1. The work of this section shall be measured as specified at the EACH price on the bid form to remove metal frames, covers or grates from existing utility and drainage structures as shown in the Drawings and/or as directed by the Engineer.
 2. The work shall include the removal and legal disposal of frame and grates or frame and

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covers as shown in the Drawings, and all labor, materials and equipment and for all incidentals required to finish the work, complete and accepted by the Engineer.

K. Item 12, Earth Excavation

1. The work of this section shall be measured as specified at the CUBIC YARD price on the bid form to remove and legally dispose unsuitable soils, remove and stockpile suitable soils and the removal of boulders and rock fragments less than one (1) cubic yard in volume from areas within the design excavation as shown in the Drawings and/or as directed by the Engineer.
2. The work shall include the removal and legal disposal of unsuitable soils, removal and stockpiling of suitable soils, removal and legal disposal of rock fragments less than one (1) cubic yard, all labor, materials and equipment, including excavation within the prescribed pay limits, formation of embankments, grading, compaction, disposal of surplus materials, preparation of subgrade and shoulders, and for all incidentals required to finish the work, complete and accepted by the Engineer.

L. Item 13, Common Borrow

1. The work of this section shall be measured as specified at the CUBIC YARD price on the bid form for the installation of common borrow for backfilling trenches where the existing excavated materials have been deemed unsuitable as directed by the Engineer.
2. The work shall include all fees, leases, permits, and equipment, labor and operating cost associated with procuring, cleaning, working and restoring a borrow pit; all labor, materials and equipment, hauling, formation of embankments, grading, compaction, disposal of surplus materials, preparation of subgrade and shoulders; and for all incidentals required to finish the work, complete and accepted by the Engineer.

M. Item 14, Structure Rock Excavation- Mechanical

1. The work of this section shall be measured as specified at the CUBIC YARD price on the bid form to remove and legally dispose bedrock or boulders and detached bedrock fragments over one (1) cubic yard in volume when encountered within the limits of Structure Excavation by employing hydraulic splitters, air rams, paving breakers, or any other mechanical methods approved by the Engineer.
2. The work shall include all labor, materials and equipment, including dewatering, removal within the prescribed limits, backfilling and disposal of surplus material, and for all incidentals required to finish the work, complete and accepted by the Engineer.
3. Structure Excavation-Earth for the removal of boulders and rock fragments less than one (1) cubic yard volume is included in other bid items under this Contract.
4. When rock is encountered, the material shall be uncovered and the Engineer notified. The Engineer shall determine quantities by volumetric computation determined from measurements performed before rock excavation begins and measurements performed after completion of rock excavation. If the Contractor fails to uncover the rock and notify the Engineer to allow ample time for cross sectioning the undisturbed material, the Contractor shall have no right-of-claim to any classification other than that allowed by the Engineer.
5. Measurements of rock excavation within a trench shall be in accordance with the trench payment limits shown on the project drawing details. The depth of rock removal will

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be limited to 12 inches below the bottom of the pipe or structure. No compensation will be made for rock excavated beyond the limits shown on the drawings and in these specifications, unless specifically authorized in writing by the Owner and Engineer. The contractor should include in the price provided for this bid item any and all costs associated with over excavation of rock beyond pay limits that they deem necessary for construction purposes due to their own means and methods.

6. Backfilling sections where rock has been removed is included for payment under this item.

N. Item 15, Trench Rock Excavation- Mechanical

1. The work of this section shall be measured as specified at the CUBIC YARD price on the bid form to remove and legally dispose bedrock or boulders and detached bedrock fragments over one ½ cubic yard in volume when encountered within the limits of Trench Excavation by employing hydraulic splitters, air rams, paving breakers, or any other mechanical methods approved by the Engineer.
2. Horizontal Pay Limits: For all pipe sizes up to and including 36 inches in diameter, measurement will be made between parallel vertical planes located 2 feet on each side of the inside diameter of the pipe; the length of trench will be measured from 1 foot beyond the outside face of a drainage structure to 1 foot beyond the outside face of the adjacent drainage structure.
3. Vertical Pay Limits in Cut Areas: Within the limits of Roadway Excavation, payment lines will extend vertically from one foot below the pipe to the subgrade; Outside the limits of Roadway Excavation, payment lines will extend vertically from one foot below the pipe to the subgrade.
4. The work shall include all labor, materials and equipment, including dewatering, removal within the prescribed limits, backfilling and disposal of surplus material, and for all incidentals required to finish the work, complete and accepted by the Engineer.
5. When rock is encountered, the material shall be uncovered and the Engineer notified. The Engineer shall determine quantities by volumetric computation determined from measurements performed before rock excavation begins and measurements performed after completion of rock excavation. If the Contractor fails to uncover the rock and notify the Engineer to allow ample time for cross sectioning the undisturbed material, the Contractor shall have no right-of-claim to any classification other than that allowed by the Engineer.
6. Measurements of rock excavation within a trench shall be in accordance with the trench payment limits shown on the project drawing details. The depth of rock removal will be limited to 12 inches below the bottom of the pipe or structure. No compensation will be made for rock excavated beyond the limits shown on the drawings and in these specifications, unless specifically authorized in writing by the Owner and Engineer. The contractor should include in the price provided for this bid item any and all costs associated with over excavation of rock beyond pay limits that they deem necessary for construction purposes due to their own means and methods.
7. Trench Excavation-Earth for the removal of boulders and rock fragments less than 1/2 cubic yard volume is included in other bid items under this Contract.

O. Item 16, Gravel Borrow Subbase Course

1. The work of this section shall be measured as specified at the CUBIC YARD price on the bid form to install one or more course of gravel borrow on prepared subgrade

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surfaces in reasonably close conformity with the dimensions and details indicated in the Drawings and as directed by the Engineer.

2. The work shall include all labor, materials and equipment, and for all incidentals, including trimming and fine grading required to finish the work, complete and accepted by the Engineer.

- P. Item 17, Class 12.5 HMA for Patching
 Item 18, Class 9.5 HMA for Patching
 Item 19, Class 9.5 HMA for Miscellaneous Work

1. The work of this section shall be measured as specified at the TON price on the bid form to construct HMA pavements on prepared foundations in conformity with the details indicated in the drawings and in accordance with the Contract Specifications.
2. The work included under Items 17 and 18 is to construct permanent trench patching. Item 19 is used to patch the gutter lines where new curbing has been installed.
3. The work for all items identified above shall include all labor, materials and equipment, and for all incidentals, including trimming and fine grading and cleaning and sweeping required to finish the work, complete and accepted by the Engineer.
4. In case of settlement or other defects in new or replaced pavements, the Contractor shall cut out, replace, restore or repair the damaged pavements at no additional expense to the Owner. This requirement shall remain in effect for 2 years after the acceptance of the work by the Owner and Engineer. The pavement area to be replaced, repaired or restored, shall extend from edge of pavement to edge of pavement, a minimum of 20 feet on either side of the defect; final pavement course shall be feathered to provide a smooth finish detail.

- Q. Item 20, Asphalt Emulsion Tack Coat

1. The work of this section shall be measured as specified at the SQUARE YARD price on the bid form to furnish, deliver, and place RS-1 liquid asphalt tack coat at the specified rate on hot mix asphalt, prior to the placement of a hot mix asphalt overlay as shown on the Drawings and as directed by the Engineer.
2. The work shall include all labor, materials and equipment, and for all incidentals, required to finish the work, complete and accepted by the Engineer.

- R. Item 21, Temporary Patching Materials/Trench

1. The work of this section shall be measured as specified at the TON price on the bid form to construct HMA pavement on backfilled and prepared trenches to achieve a temporary patch as shown in the Drawings and as directed by the Engineer as well as patching pavement at the end of each work week as approved by the Engineer.
2. The work shall include all labor, materials and equipment, and for all incidentals, including trimming and fine grading and cleaning and sweeping required to finish the work, complete and accepted by the Engineer.
3. This bid item shall also include all necessary dust control measures to prevent dust from becoming a nuisance to residents and businesses. This shall include the application of water and calcium chloride to inhibit dust from trenches, stockpiles or any other exposed surfaces that may produce dust. Calcium chloride and water application shall be performed as necessary to prevent a dust nuisance and as required by the Engineer. The contractor shall at a minimum budget in this bid item the cost

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associated with daily application of calcium chloride and water to exposed trenches prior to application of temporary pavement.

- S. Item 22, Reinforced Concrete Pipe (RCP) M 170 Class III* 12”
Item 23, Reinforced Concrete Pipe (RCP) M 170 Class III* 15”
Item 24 Reinforced Concrete Pipe (RCP) M 170 Class V* 24”

1. The work of this section shall be measured as specified at the LINEAR FOOT price on the bid form to furnish and install Class III and Class IV Reinforced Concrete Drain Pipe of various sizes at the locations and various depths shown on the Drawings and as directed by the Engineer.
2. Measurement for payment shall be measured by the linear feet of continuous runs of drain pipe. Pipe with sloped or skewed ends will be measured along their respective inverts. For the purposes of measurement, the end of pipe in closed structures shall be considered to be flush with the inside face of said structure.
3. The work shall include trench excavation to a depth sufficient to receive the appropriate layer of bedding material, shaping of the top of the bedding material, to receive the bell of the pipe, dewatering, laying, setting, and jointing all pipe, pipe couplings, fitting and gaskets, including connection to existing drainage structures or pipes, filter fabric, for design and furnishing, placing and subsequently removing support of excavations and trench protection, repair and/or relocation of any utility lines broken and/or conflicting with construction, backfilling support of excavations, backfilling with suitable on-site material, water for dust control, furnishing and installing backfill material where adequate material does not exist, the legal disposal of all excess unsuitable materials and for all labor, materials and equipment, and for all incidentals required to finish the work, complete and accepted by the Engineer.
4. Removal, disposal and backfilling of unsuitable material below grade, saw cutting, removal and disposal of flexible pavement and pipe bedding shall be included in other items under this Contract.
5. Required testing of drain pipe shall be included in this item.
6. Support of overhead utilities and underground utilities to be crossed as part of the drain pipe installation shall be included in this item.

- T. Item 25, ¾” Crushed Stone Pipe Bedding

1. The work of this section shall be measured as specified at the CUBIC YARD price on the bid form to deliver and furnish crushed stone bedding material below and around the drain or sewer pipe at the depth specified on the Drawings and as directed by the Engineer.
2. The work shall include all labor, materials and equipment for providing and installing such bedding material and for all incidentals required to finish the work, complete and accepted by the Engineer.

- U. Item 26, Polyvinyl Chloride (PVC) Sewer Pipe- 24”

1. The work of this section shall be measured as specified at the LINEAR FOOT price on the bid form to furnish and install 24 Inch PVC Gravity Sewer main at the locations and depths shown on the Drawings and as directed by the Engineer.
2. Measurement for payment shall be measured by the linear feet of continuous runs of

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sewer pipe. Pipe with sloped or skewed ends will be measured along their respective inverts. For the purposes of measurement, the end of pipe in closed structures shall be considered to be flush with the inside face of said structure.

3. The work shall include trench excavation to a depth sufficient to receive the appropriate layer of bedding material, shaping of the top of the bedding material, to receive the bell of the pipe, dewatering, laying, setting, and jointing all pipe, pipe couplings, installation and subsequent removal of temporary bypass, as needed, including all pipes, pumps and all other materials needed to complete the work, fitting and gaskets, including connection to existing sewer manholes or pipes, including coring a new invert into the existing manhole and removing the existing plug in the existing sewer main to achieve the pipe cut in connection, all grout and concrete needed to properly secure the pipe to pipe cut in connection, patching of the old invert in both the manhole and sewer main, filter fabric, for design and furnishing, placing and subsequently removing support of excavations and trench protection, repair and/or relocation of any utility lines broken and/or conflicting with construction, backfilling support of excavations, backfilling with suitable on-site material, water for dust control, furnishing and installing backfill material where adequate material does not exist, the legal disposal of all excess unsuitable materials and for all labor, materials and equipment, and for all incidentals required to finish the work, complete and accepted by the Engineer.
4. Removal, disposal and backfilling of unsuitable material below grade, saw cutting, removal and disposal of flexible pavement and pipe bedding shall be included in other items under this Contract.
5. Required testing of the gravity sewer main shall be included for payment under in this item.
6. Support of overhead utilities and underground utilities to be crossed as part of the sewer main installation shall be included for payment under this item.

V. Item 27, Frame and Grate- Heavy Duty (Bicycle Safe)

Item 28, Frame and Cover- Heavy Duty

Item 29, Frame and Cover – Light Duty

1. The work of this section shall be measured as specified at the EACH price on the bid form to deliver and furnish frame and grate or frame and cover assemblies on existing and proposed catch basins and manholes as shown on the drawings and as directed by the Engineer.
2. The work shall include all labor, materials and equipment for providing said assemblies and for all incidentals, including trimming and fine grading required to finish the work, complete and accepted by the Engineer
3. This includes furnishing and installing brick and mortar and/or riser rings under frames.

W. Item 30, Precast Concrete Apron Stone 38"

1. The work of this section shall be measured as specified at the EACH price on the bid form to construct precast apron stone curbing on prepared gravel bases for catch basins as shown in the Drawings and as directed by the Engineer.
2. The work shall include all labor, materials and equipment, including excavation, joints, gravel borrow subbase course including compaction and trimming and fine grading backfilling, compacting, and for all incidentals, including concrete curb lock, required to finish the work, complete and accepted by the Engineer.

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3. Saw cutting, removal and disposal of flexible pavement and sidewalk is included in other bid items under this Contract.

X. Item 31, Precast 4'-0" Round Catch Basin
Item 32, Precast 4'-0" Round Manhole

1. The work of this section shall be measured as specified at the EACH price on the bid form to construct manholes and catch basins between zero to 12 feet in depth in reasonably close conformity with the dimensions and details included in the Drawings and as directed by the Engineer.
2. The work shall include all labor, materials and equipment for providing said structures including excavation (except rock excavation), placing and compacting backfill, steps, dewatering, as needed, design, furnishing, installing and subsequently removing support of excavation waterproofing structures, repair and/or relocation of any utility lines broken and/or conflicting with construction, the legal disposal of all surplus excavated and/or unsuitable material, connecting new and existing drain pipes, testing for leakage, clean-up and for all incidentals required to finish the work, complete and accepted by the Engineer.
3. Structure Rock Excavation shall be included in other bid items under the Contract.
4. Support of overhead utilities and underground utilities to be crossed as part of the drain catch basin installation shall be included in this item.

Y. Item 33, Precast 4'-0" Round Manhole (Greater than 12'-0" in Depth)
Item 34, Precast 6'-0" Round Manhole (Greater than 12'-0" in Depth)
Item 35, Precast 8'-0" Round Manhole (Greater than 12'-0" in Depth)

1. The work of this section shall be measured as specified at the EACH price on the bid form to furnish and install manholes of reinforced precast concrete at a depth greater than 12'-0" in reasonably close conformity with the dimensions and details included in the Drawings and as directed by the Engineer.
2. The work shall include excavation (except rock excavation), placing and compacting backfill, steps, dewatering, design, furnishing, installing and subsequently removing support of excavation, furnishing and installing concrete bases including crushed stone foundation, furnish and install crushed stone bedding, riser sections, cones or top slabs, landing platforms, repair and/or relocation of any utility lines broken and/or conflicting with construction, connecting proposed and existing drain pipes, waterproofing structures, testing for leakage, butyl rubber, clean-up, the legal disposal of all surplus excavated and/or unsuitable material, clean-up and for all incidentals required to finish the work, complete and accepted by the Engineer.
3. Structure Rock Excavation shall be included in other bid items under the Contract.
4. Support of overhead utilities and underground utilities to be crossed as part of the drain manhole installation shall be included in this item.

Z. Item 36, Plug and Cap Pipe- All Sizes

1. The work of this section shall be measured as specified at the EACH price on the bid form to provide and furnish plugs and caps for various sizes and types of pipe at the locations shown in the Drawings and as directed by the Engineer.
2. The work shall include all labor, materials and equipment required to provide said

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plugs or caps and for all incidentals required to finish the work, complete and accepted by the Engineer.

AA. Item 37, Cleaning and Flushing Pipe- All Types and Sizes

1. The work of this section shall be measured as specified at the LINEAR FOOT price on the bid form to clean storm drains of all types and sizes as shown in the Drawings and as directed by the Engineer.
2. Measurement for payment will be from center-to-center of drainage structures for all pipe lines actually cleaned, regardless of the sizes of said pipe.
3. The work shall include all labor, materials and equipment required to conduct this operation by normal methods and for all incidentals required to finish the work, complete and accepted by the Engineer.
4. Cleaning of newly installed drain pipes will be included in other bid items under the Contract.

BB. Item 38, Cleaning Catch Basins - All Sizes

1. The work of this section shall be measured as specified at the EACH price on the bid form to clean catch basins of all types and sizes as shown in the Drawings and as directed by the Engineer.
2. The work shall include all labor, materials and equipment required to conduct this operation by normal methods and for all incidentals required to finish the work, complete and accepted by the Engineer
3. Cleaning of newly installed catch basins and manholes shall be included in other bid items under this Contract.

CC. Item 39, Portland Cement Sidewalk Monolithic

1. The work of this section shall be measured as specified at the CUBIC YARD price on the bid form to construct sidewalks and wheelchair ramps on prepared gravel bases as shown in the Drawings and as directed by the Engineer.
2. The work shall include all labor, including trimming and fine grading, materials and equipment, including expansion joint material, reinforcement, and for all incidentals required to finish the work, complete and accepted by the Engineer.
3. Excavation and gravel borrow subbase will be included in other bid items under this Contract.
4. A maximum 5 percent overrun of calculated quantities based on the required thickness as shown in the Drawings is permissible.

**DD. Item 40, Cement Concrete Curb Precast- Straight
Item 41, Cement Concrete Curb Precast- Circular**

1. The work of this section shall be measured as specified at the LINEAR FOOT price on the bid form to construct concrete curb on prepared gravel bases including cement concrete curb lock as shown in the Drawings and as directed by the Engineer.
2. Measurement for payment will be measured along the front face of the sections of curbing at the finished grade elevation.
3. The work shall include all labor, materials and equipment, including excavation, joints,

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gravel borrow subbase course including compaction and trimming and fine grading backfilling, compacting and for all incidentals, including concrete curb lock, required to finish the work, complete and accepted by the Engineer.

4. Saw cutting, removal and disposal of flexible pavement and sidewalk shall be included in other bid items under this Contract.

EE. Item 42, Precast Concrete Wheelchair Ramp Curb Transition
Item 43, Precast Concrete Ramp Stone 18- Inch- Circular

5. The work of this section shall be measured as specified at the EACH price on the bid form to construct concrete transition curb and concrete ramp stones on prepared gravel bases including cement concrete curb lock as shown in the Drawings and as directed by the Engineer.
6. The work shall include all labor, materials and equipment, including excavation, joints, gravel borrow subbase course including compaction and trimming and fine grading backfilling, compacting and for all incidentals, including concrete curb lock, required to finish the work, complete and accepted by the Engineer.
7. Saw cutting, removal of flexible pavement and sidewalk shall be included in other bid items under this Contract.

FF. Item 44, Test Pits (Paved or Unpaved)

1. The work of this section shall be measured as specified at the EACH price on the bid form to excavate exploratory test pits for the purpose of locating utilities of every type, including but not limited to, water, sewer, storm drains, gas, and power distribution and communications, and for determining water table elevations and soil condition as shown in the Drawings and as directed by the Engineer.
2. The work shall include all labor, materials and equipment, including saw cutting, cutting and matching, removal and legal disposal of bituminous pavement and excess soil, excavation to depths required by the Engineer, de-watering, shoring, providing means of egress for the Engineer to safely access the test pit, furnishing and installing bedding material for utilities or structures encountered in the test pit, furnishing and installing loam and seed in areas outside of paved areas, and furnishing, installing, and properly compacting backfill including 12-inch processed gravel sub-base under paved areas and for all incidentals required to finish the work, complete and accepted by the Engineer.
3. Test pits performed for the Contractor's convenience are not payable under this item and are considered incidental to the work of the Contract.
4. Replacing pavement shall be included in other bid items under this Contract.

GG. Item 45, Full Depth Sawcut of Bituminous Pavement
Item 46, Full Depth Sawcut of Portland Cement Concrete Sidewalks and Driveways

1. The work of this section shall be measured as specified at the LINEAR FOOT price on the bid. The work in Item 47 consists of cutting bituminous pavement to be removed for trench excavation and for the replacement of curbing as shown in the Drawings and as directed by the Engineer. The work in Item 47 consists of cutting sections of cement concrete sidewalk to remain to create a neat line for replacement as shown in the Drawings and as directed by the Engineer.
2. The work shall for both items shall include all labor, materials and equipment, and for

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- all incidentals required to finish the work, complete and accepted by the Engineer.
3. Any existing surface course, base course or combination thereof, or cement concrete beyond the neat lines called for on the Drawings that is damaged or destroyed by the Contractor's operations shall be either repaired or replaced at no additional cost to the Owner.
 4. Removing and disposing flexible pavement and trench excavation shall be included under in other bid items under this Contract.

HH. Item 47, Reconstruct Brick Shelf and Manhole Invert

1. The work of this section shall be measured as specified at the EACH price on the bid form to rebuild the existing brick shelf and manhole inlet in the existing sewer manhole at the location and elevation shown on the Drawings and as directed by the engineer. The work consists of removing and legally disposing bricks and furnishing and installing bricks to create a new shelf and invert.
2. The work shall include all labor, materials and equipment, including the removal and legal disposal of bricks, furnishing bricks, mortar, installation and subsequent removal of temporary bypass, as needed, including all pipes, pumps and all other materials needed to complete the work, and all incidentals required to finish the work, complete and accepted by the Engineer.

II. Item 48, Loam Borrow 4 Inches Deep

1. The work of this section shall be measured as specified at the SQUARE YARD price on the bid form to place loam to the lines, grades, depths at the locations shown on the Drawings and as directed by the Engineer.
2. The work shall include all labor, materials and equipment including trimming and fine grading, and all incidentals required to finish the work, complete and accepted by the Engineer.
3. Areas outside the project limits that have been damaged by the Contractor's operations shall be replaced at no additional cost to the Owner.

JJ. Item 49, Seeding

1. The work of this section shall be measured as specified at the SQUARE YARD price on the bid form to place prepare the seed bed, furnish and place materials, and establish grass areas for areas adjacent to lawns or sidewalks at the locations shown on the Drawings and as directed by the Engineer.
2. The work shall include preparation of seed beds, furnishing and applying lime, fertilizer, mulch, seed, raking, mowing, watering, and care during construction of the seeded areas and for all labor, materials and equipment including trimming and fine grading, and all incidentals required to finish the work, complete and accepted by the Engineer.
3. Eighty-five percent of the total contract price will be paid at the time of the initial seeding. The remainder, 15 percent, will be paid when the newly seeded areas have been accepted.
4. If seeding is done at a time other than the specified seeding date, the entire payment for seeding will be withheld until a uniform acceptable stand or turf, as determined by the Engineer, has been obtained.

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KK. Item 50, Detectable Warning Panel

1. The work of this section shall be measured as specified at the SQUARE FOOT price on the bid form provide and install a panel with truncated domes in an array pattern that is compliant with the Americans with Disabilities Act (ADA) warning and directional systems for the visually impaired at the locations shown on the Drawings and as directed by the Engineer.
2. The work shall include all labor, materials and equipment, and all incidentals required to finish the work, complete and accepted by the Engineer.

**LL. Item 51, Adjust Frame and Grate to Grade
Item 52, Adjust Frame and Cover to Grade**

1. The work of this section shall be measured as specified at the EACH price on the bid form to adjust drainage catch basin frame and grates and frame to match the grades of the temporary and permanent trench patching locations shown on the Drawings and as directed by the Engineer.
2. The work shall include all labor, materials and equipment, and all incidentals required to finish the work, complete and accepted by the Engineer.

MM. Item 53, Final Epoxy Resin Pavement Markings

1. The work of this section shall be measured as specified at the LUMP SUM price on the bid form to apply pavement markings including broken lines, centerlines, stop bars, words and arrows, at the width, color and locations shown on the Drawings and as directed by the Engineer.
2. The work shall include all labor, materials and equipment, including protection of newly applied markings from traffic, layout, cleaning and sweeping, furnishing and applying the pavement markings and all incidentals required to finish the work, complete and accepted by the Engineer.
3. Payment shall be as follows:
 - a. Minimum 350/225 (white/yellow): 100% contract unit price
 - b. Minimum 330/205 (white/yellow): 90% contract unit price
 - c. Minimum 310/185 (white/yellow): 80% contract unit price
 - d. Minimum 300/175 (white/yellow): 75% contract unit price
 - e. Below 300/175 (white/yellow): 0% contract unit price
4. The payment for work associated with placing final epoxy resin pavement markings controls shall be a Lump Sum Price as provided on the Bid Form for Bid Item No. 54.

NN. Item 54, Unsuitable Material Below Grade Excavation and Disposal

1. Under the unit price bid for Item 55 the Contractor shall excavate below the specified depth to clear utilities or match existing mains, or to remove peat, clay or other unsuitable material, below the grade of pipe a minimum of 6-inches, when and as directed by the Engineer; load, transport, and legally dispose of such material away from the job; furnish and place approved process gravel material in the place of material removed.

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2. Measurement for payment will be on the basis of cubic yards of material excavated within the detailed trench payment width and at authorized depth, as measured by the Engineer. There will be no separate payment for fill used to replace excavated unsuitable material – it shall be included in this bid item.

OO. Item 55, Pavement Cores

1. Under the unit price bid for Item 55 the Contractor shall hire an experienced Subcontractor, prior to the start of construction, to extract three (3) 4-inch diameter full depth pavement cores by wet core method within the proposed limits to verify the pavement thickness for trench patching.
2. This work also includes repairing core holes using a high strength grout or cold patch, further examining/testing cores, including measurements and photographs and to provide a subsequent report documenting findings
3. The payment for work associated wit Pavement Cores shall be a Lump Sum Price as provided on the Bid Form for Bid Item No, 55.

PP. Item 56, Policing (Allowance)

1. The amount to be paid for under Bid Item No. 56 shall be the submitted invoice of traffic police service furnished for the purpose of directing traffic.
2. The quantity to be paid for under Bid Item No. 56 shall be full compensation for the invoiced amounts plus Contractor's allowable overhead and profit. Abnormal and unreasonable expenses incurred by the Owner may be charged against the amount owed to the Contractor under this contract and are detailed as follows:
 - a. Contractor caused delays in the prosecution of work that result in hiring traffic police for more hours than would have been required during normal prosecution of work.
 - b. Reconstruction and/or reinstallation of any portions of the work, as a result of improper initial installation, for which traffic police is required.
 - c. Traffic police required at a site where the Contractor is not working or outside of the Contractor's standard workday as a result of obstructions to traffic that remain in the traveled way.
 - d. All other incidents resulting from the Contractor's operations requiring traffic police that would not normally be encountered during the progress of a well-organized project employing proper construction methods.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

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SECTION 01045

CUTTING, CORING AND PATCHING

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. This Section covers the cutting, coring, rough and finish patching of holes and openings in existing construction.
- B. The Contractor shall leave all chases or openings for the installation of his own or any other contractor's or subcontractor's work, or shall cut the same in existing work, and shall see that all sleeves or forms are at the work and properly set in ample time to prevent delays. He shall see that all such chases, openings, and sleeves are located accurately and are of proper size and shape and shall consult with the Engineer and the contractors and subcontractors concerned in reference to this work.
- C. In case of his failure to leave or cut all such openings or have all such sleeves provided and set in proper time, he shall cut them or set them afterwards at his own expense, but in so doing he shall confine the cutting to the smallest extent possible consistent with the work to be done. In no case shall piers or structural members be cut without the written consent of the Engineer.
- D. The Contractor shall not cut or alter the work of any subcontractor or any other contractor, nor permit any of his subcontractors to cut or alter the work of any other contractor or subcontractor, except with the written consent of the contractor or subcontractor whose work is to be cut or altered or with the written consent of the Engineer. All cutting and patching or repairing made necessary by the negligence, carelessness, or incompetence of the Contractor or any of his subcontractors shall be done by or at the expense of the Contractor and shall be the responsibility of the Contractor.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Concrete and grout for rough patching shall be approved by the Engineer.
- B. Materials for finish patching shall be equal to those of adjacent construction.

PART 3 - EXECUTION

3.1 GENERAL

- A. All cutting and coring shall be performed in such a manner as to limit the extent of patching.
- B. All holes cut through concrete and masonry walls, slabs or arches shall be core drilled unless otherwise approved. No structural members shall be cut without approval of the Engineer and all such cutting shall be done in a manner directed by him. No holes may be drilled in beams or other structural members without obtaining prior approval. All work shall be performed by mechanics skilled in this type of work.

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- C. Rough patching shall be such as to bring the cut or cored area flush with existing construction unless otherwise shown. Finish patching shall match existing surfaces as approved.
- D. Prior to coring and cutting, rebar shall be located using a Rebar Locator.® If possible, relocate to avoid rebar.

3.2 CORING

- A. Coring shall be performed with an approved non-impact rotary tool with diamond core drills. Size of holes shall be suitable for pipe, conduit, sleeves, equipment or mechanical seals to be installed.
- B. All equipment shall conform to OSHA standards and specifications pertaining to plugs, noise and fume pollution, wiring and maintenance.
- C. Provide protection for existing equipment, utilities and critical areas against water or other damage caused by drilling operation.
- D. Slurry or tailings resulting from coring operations shall be vacuumed or otherwise removed from the area following drilling.

3.03 CUTTING

- A. Cutting shall be performed with a concrete wall saw and diamond saw blades of proper size.
- B. Provide for control of slurry generated by sawing operation on both sides of wall.
- C. When cutting a reinforced concrete wall, the cutting shall be done so as not to damage bond between the concrete and reinforcing steel left in structure. Cut shall be made so that steel neither protrudes nor is recessed from face of the cut.
- D. Adequate bracing of area to be cut shall be installed prior to start of cutting. Check area during sawing operations for partial cracking and provide additional bracing as required to prevent a partial release of cut area during sawing operations.
- E. Provide equipment of adequate size to remove cut panel.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Survey work and other field engineering responsibilities of the Contractor.

1.2 REQUIREMENTS

- A. Prior to the start of Construction, the Contractor shall perform up to three (3) Pavement Cores to verify thickness of pavement need to repair trenches to match the existing grade.
- B. The Contractor shall be responsible for layout of the work and the establishment of lines and grades.
- C. Establish elevations, lines, levels, reference marks, batter boards, etc., required during the progress of the Work. Verify such marks by instrument to confirm accuracy.
- D. Locate and protect survey control and reference points.
- E. Make, check, and be responsible for all measurements and dimensions necessary for the proper construction of the Work.
- F. The Engineer will be permitted to check the lines, elevations, reference marks, batter boards, etc., set by the Contractor. The Contractor shall correct any errors found in lines, elevations, reference marks, batter boards, etc. Such a check shall not be construed as approval of the Contractor's work and shall not relieve or diminish the responsibility of the Contractor for the accurate construction and completion of the Work.
- G. The Contractor is responsible to verify existing and proposed grades shown on the Drawings prior to the start of construction. If the Contractor finds discrepancies than that shown on the Drawing, the Contractor shall notify the Engineer immediately.

1.3 QUALITY ASSURANCE

- A. Qualifications
 - 1. Employ a Civil Engineer or Land Surveyor registered within the State of Rhode Island, acceptable to the Engineer.
 - 2. Employ a licensed subcontractor to conduct pavement cores.

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B. Certifications and Documents

1. Submit certificate signed by the Contractor's Engineer or Land Surveyor stating elevations and locations of the Work are in conformance with the Contract Documents.
2. Submit one (1) copy of the pavement core findings to the Engineer and Owner.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

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SECTION 01110

ENVIRONMENTAL PROTECTION PROCEDURES

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. Furnish all labor, materials and equipment and perform all work required for the prevention of environmental pollution in conformance with applicable laws and regulations, during and as the result of construction operations under this Contract. For the purpose of this Section, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to man; or degrade the utility of the environment for aesthetic and/or recreational purposes.
- B. The control of environmental pollution requires consideration of air, water and land, and involves management of noise and solid waste, as well as other pollutants.
- C. Schedule and conduct all work in a manner that will minimize the erosion of soils in the area of the work. Provide erosion control measures such as diversion channels, sedimentation or filtration systems, berms, staked hay bales, seeding, mulching or other special surface treatments as are required to prevent silting and muddying of streams, rivers, impoundments, lakes, etc. All erosion control measures shall be in place in an area prior to any construction activity in that area.
- D. This Section is intended to ensure that construction is achieved with a minimum of disturbance to the existing ecological balance between a water resource and its surroundings. These are general guidelines. It is the Contractor's responsibility to determine the specific construction techniques to meet these guidelines.
- E. **APPLICABLE REGULATIONS**
 - A. Comply with all applicable Federal, State and local laws and regulations concerning environmental pollution control and abatement.

1.2 NOTIFICATIONS

- A. The Engineer will notify the Contractor in writing of any non-compliance with the foregoing provisions or of any environmentally objectionable acts and corrective action to be taken. State or local agencies responsible for verification of certain aspects of the environmental protection requirements shall notify the Contractor in writing, through the Engineer, of any non-compliance with State or local requirements. After receipt of such notice from the Engineer or from the regulatory agency through the Engineer, immediately take corrective action. Such notice, when delivered to the Contractor or his authorized representative at the site of the work, shall be deemed sufficient for the purpose. If the Contractor fails or refuses to comply promptly, the Owner may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs or damages by the Contractor unless it is later determined that the Contractor was in compliance.

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1.4 IMPLEMENTATION

- A. Prior to commencement of the work, meet with the Engineer to develop mutual understandings relative to compliance with these provisions and administration of the environmental pollution control program.
- B. Remove temporary environmental control features, when approved by the Engineer and incorporate permanent control features into the project at the earliest practicable time.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 EROSION CONTROL

- A. Provide positive means of erosion control such as shallow ditches around construction to carry off surface water. Erosion control measures, such as siltation basins, compost filter socks, sack insert catch basin inlet protection, mulching, jute netting and other equivalent techniques, shall be used as appropriate. Flow of surface water into excavated areas shall be prevented. Ditches around construction area shall also be used to carry away water resulting from dewatering of excavated areas. At the completion of the work, ditches shall be backfilled and the ground surface restored to original condition or new final condition as shown on the Drawings.

3.2 PROTECTION OF STREAMS AND SURFACE WATERS

- A. Do not discharge water from dewatering operations directly into any live or intermittent stream, channel, wetlands, surface water or any storm sewer. Water from dewatering operations shall be treated by filtration, settling basins, or other approved method to reduce the amount of sediment contained in the water to allowable levels.
- B. Take all preventative measures to avoid spillage of petroleum products and other pollutants. In the event of any spillage, prompt remedial action shall be taken in accordance with a contingency action plan approved by the Rhode Island Department of Environmental Management. Submit two copies of approved contingency plans to the Engineer.

3.3 PROTECTION OF LAND RESOURCES

- A. Restore land resources within the project boundaries and outside the limits of permanent work to a condition, after completion of construction that will appear to be natural and not detract from the appearance of the project. Confine all construction activities to areas shown on the Drawings.
- B. Outside of areas requiring earthwork for the construction of the new facilities, do not deface, injure, or destroy trees or shrubs, nor remove or cut them without prior approval. No ropes, cables, or guys shall be fastened to or attached to any existing nearby trees for anchorage unless specifically authorized by the Engineer. Where such special emergency use is permitted, first wrap the trunk with a sufficient thickness of burlap or rags over which softwood cleats shall be tied before any rope, cable, or wire is placed. The Contractor shall in any event be responsible for any damage resulting from such use.

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- C. Before beginning operations near them, protect trees that may possibly be defaced, bruised, injured, or otherwise damaged by the construction equipment, dumping or other operations, by placing boards, planks, or poles around them. Monuments and markers shall be protected similarly.
- D. Any trees or other landscape features scarred or damaged by the Contractor's equipment or operations shall be restored to their original condition. The Engineer will decide the method of restoration to be used and whether damaged trees shall be treated and healed or removed and disposed of.
 - 1. All scars made on trees by equipment, construction operations, or by the removal of limbs larger than 1-in in diameter shall be coated as soon as possible with an approved tree wound dressing. All trimming or pruning shall be performed in an approved manner by experienced workmen with saws or pruning shears. Tree trimming with axes will not be permitted.
 - 2. Climbing ropes shall be used where necessary for safety. Trees that are to remain, either within or outside established clearing limits, that are subsequently damaged by the Contractor and are beyond saving in the opinion of the Engineer, shall be immediately removed and replaced.
- E. The locations of the Contractor's storage and other construction buildings, required temporarily in the performance of the work, shall be in cleared portions of the job site or areas to be cleared as shown on the Drawings and approved by the Engineer and shall not be within wetlands or floodplains. The preservation of the landscape shall be an imperative consideration in the selection of all sites and in the construction of buildings. Drawings showing storage facilities shall be submitted for approval of the Engineer.
- F. If the Contractor proposes to embankments and excavations for plant and/or work areas, he shall submit the following for approval at least ten days prior to scheduled start of such temporary work.
 - 1. A layout of all excavations, embankments and drainage to be constructed within the work area.
 - 2. Drawings and cross sections of proposed embankments and their foundations, including a description of proposed materials.
 - 3. A drawing showing the proposed restoration of the area in accordance with the Drawings and Specifications. Indicate the proposed removal of any trees and shrubs outside the limits of existing clearing area. Indicate locations of guard posts or barriers required to control vehicular traffic and protect trees and shrubs to be maintained undamaged. The Drawing shall provide for the obliteration of construction scars as such and shall provide for a natural appearing final condition of the area. Modification of the Contractor's approved drawings shall be made only with the written approval of the Engineer. No unauthorized road construction, excavation or embankment construction including disposal areas will be permitted.
- G. Remove all signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess waste materials, or any other vestiges of construction as directed by the Engineer. It is anticipated that excavation, filling and plowing of roadways will be required to restore the area to near natural conditions which will permit the growth of vegetation thereon.

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- H. All debris and excess material will be disposed of outside wetland or floodplain areas in an environmentally sound manner.

3.4 PROTECTION OF AIR QUALITY

- A. Burning - Burning at the project site for the disposal of refuse and debris will not be permitted.
- B. Dust Control - Maintain all excavations, embankment, stockpiles, access roads, plant sites, waste areas, borrow areas and all other work areas within or without the project boundaries free from dust which could cause the standards for air pollution to be exceeded and which would cause a hazard or nuisance to others.
- C. An approved method of stabilization consisting of sprinkling or other similar methods will be permitted to control dust. The use of petroleum products is prohibited. The use of chlorides may be permitted with approval from the Engineer.
- D. Sprinkling, to be approved, must be repeated at such intervals as to keep all parts of the disturbed area at least damp at all times, and the Contractor shall have sufficient competent equipment on the job to accomplish this. Dust control shall be performed as the work proceeds and whenever a dust nuisance or hazard occurs, as determined by the Engineer.

3.5 NOISE CONTROL

- A. Make every effort to minimize noises caused by the construction operations. Equipment shall be equipped with silencers or mufflers designed to operate with the least possible noise in compliance with Federal and State regulations.

3.6 MAINTENANCE OF POLLUTION CONTROL FACILITIES DURING CONSTRUCTION

- A. Maintain all facilities constructed for pollution control as long as the operations creating the particular pollutant are being carried out or until the material concerned has become stabilized to the extent that pollution is no longer being created.

END OF SECTION

PART 1 - GENERAL

1.1 PRECONSTRUCTION CONFERENCE

- A. After the bids have been opened but prior to the start of the construction there will be a preconstruction conference to discuss the phasing and scheduling of the construction project. The specific time and place of the conference will be arranged by the Engineer after the Contract has been awarded.

1.2 PROGRESS MEETINGS

- A. During the course of the construction project, the Contractor shall attend meetings at an interval specified by the Owner and/or Engineer at the field office or other location designated by Engineer. The attendance of subcontractors and suppliers may be required during the progress of the work. The Contractor's delegate to the meeting shall be prepared and authorized to discuss the following items:
 - 1. Progress of Work in relation to Contract Schedule.
 - 2. Proposed Work activities for forthcoming period.
 - 3. Resources committed to Contract.
 - 4. Coordination of Work with others.
 - 5. Status of procurement of equipment and materials.
 - 6. Status of Submittals.
 - 7. Outstanding actions, decisions, or approvals that affect Work activities.
 - 8. Security issues.
 - 9. Quality Issues
 - 10. Potential Claims
 - 11. Contract Changes
 - 12. Costs & Budget
 - 13. Mitigation Measures

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

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SECTION 01400

QUALITY CONTROL

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Quality Assurance and Control of Installation
- B. References
- C. Field samples
- D. Inspection and testing laboratory services
- E. Manufacturers' field services and reports

1.2 RELATED SECTIONS

- A. Submittals- Refer to Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2 of the General Requirements

1.3 QUALITY ASSURANCE AND CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship to produce work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. Comply with specified standards as a minimum quality for the work except when more stringent tolerances, codes or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.
- G. Verify that field measurements are as indicated on the Shop Drawings or as instructed by the manufacturer.

1.4 REFERENCES

- A. Conform to reference standard by date of issue current on date of Contract Documents.
- B. Obtain copies of standards when required by Contract Documents.

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- C. Should specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention of inference otherwise in any reference document.

1.5 FIELD SAMPLES

- A. Install field samples at the site for review, as required by individual specification sections.
- B. Acceptable samples represent a quality level for the work.
- C. Where field sample is specified in individual sections to be removed, clear area after field sample has been accepted by Engineer.

1.6 INSPECTION AND TESTING LABORATORY SERVICES

- A. The Contractor shall submit names of all the firms to be utilized for testing and analytical services for approval by the Engineer. No results or observations will be accepted unless performed by an approved testing firm.
- B. The testing firm will perform inspections, tests and other services specified in individual specification sections and as required by the Engineer.
- C. Reports will be submitted by the testing firm to the Engineer, in duplicate, indicating observations and results of tests, and compliance or non-compliance with Contract Documents.
- D. Cooperate with testing firm, furnish samples of materials, design mix, equipment, tools, storage, access, and assistance as requested.
 - 1. Notify Engineer and testing firm seven (7) days prior to expected time for operations requiring services.
 - 2. All costs associated with testing will be paid by the Contractor.
- E. Re-testing required due to non-conformance to specified requirements shall be performed by the same testing firm per instructions by the Engineer. Payment for re-testing will be paid by the Contractor with no additional cost to the Owner.

1.7 MANUFACTURER'S FIELD SERVICES AND REPORTS

- A. Submit qualifications of observer to Engineer 30 days in advance of required observations. Observer used shall be subject to approval of Engineer.
- B. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, testing, adjusting and balance of equipment as applicable, and to initiate instructions when necessary.

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- C. Individuals to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- D. Submit report in duplicate to Engineer for review, within 30 days of observation.

1.8 TOLERANCES

- A. Monitor the fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with the manufacturers' tolerances. When the manufacturers' tolerances conflict with the Contract Documents, request a clarification from the Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

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SECTION 01500

TEMPORARY FACILITIES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Provide all temporary facilities necessary for the proper completion of the work, as necessary and as specified.
- B. The Contractor's attention is directed to the General Requirements and Section 01501, Temporary Controls.

1.2 WATER SUPPLY

- A. The Contractor shall make arrangements and pay for all potable water necessary for completion of construction operations under this contract.

1.3 WATER FOR CONSTRUCTION PURPOSES

- A. The City of Pawtucket Department of Public Works located at 250 Armistice Boulevard #3254, Pawtucket, RI 02860 has a hydrant on site. The Contractor shall make arrangements with the Owner to use available water supplies for construction purposes.
- B. The express approval of the Owner shall be obtained before water is used. Waste of water by the Contractor shall be sufficient cause for withdrawing the privilege of unrestricted use. Hydrant shall only be operated under supervision of the Owner's personnel.
- C. The Contractor is required to meter all water use and the Contractor will be charged for this use.
- D. If a water ban is instituted, the Owner reserves the right to discontinue the Contractor's use of potable water.

1.4 TEMPORARY HEAT

- A. If temporary heat is required for the protection of the Work, the Contractor shall provide and install suitable heating apparatus, shall provide adequate and proper fuel, and shall maintain heat as required.

1.5 TEMPORARY ELECTRICAL

- A. The Contractor shall make all necessary applications and arrangements and pay all fees and charges for electrical energy for power and light necessary for the proper completion of the Work and during its entire progress. The Contractor shall provide and pay for all temporary wiring, switches, connections, and meters.
- B. The Contractor shall provide sufficient electric lighting so that all work may be done in a workmanlike manner when there is not sufficient daylight.

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1.6 TEMPORARY FENCING

- A. Provide commercial grade chain link fence to prevent trespass by workmen and suppliers onto private property and the public from the construction site.

1.7 PROJECT SIGN

- A. As shown in Appendix G of these specifications.

1.8 FIRE EXTINGUISHERS

- A. Provide portable UL-rated, Class A fire extinguishers for all temporary offices and similar spaces. In other locations, provide portable UL-rated Class ABC dry chemical extinguishers a combination of NEPA recommended Classes for the exposure. Comply with NEPA 10 and 241 for classification, extinguishing agent and size required by location and class of fire exposure.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

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SECTION 01501

TEMPORARY CONTROLS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Temporary Controls: Fencing, Barriers
- B. Control and Diversion of Water and Dewatering
- C. Erosion and Sediment Control
- D. Dust Control
- E. Noise Control
- F. Pollution Control
- G. Traffic Control
- H. Progressive Cleaning

1.2 RELATED SECTIONS

- A. Section 01500, Temporary Facilities
- B. Section 01570, Traffic Regulations
- C. Section 02305, Support of Excavation and Dewatering
- D. Section 02273, Erosion and Sediment Control

1.2 BARRIERS AND FENCING

- A. Provide barriers to prevent unauthorized entry to construction areas to allow for Owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing buildings.
- C. Provide protection for plant life designated to remain. Replace damaged plant life.
- D. Protect non-owned vehicular traffic, stored materials, site and structure from damage and to minimize hazards to general public (i.e., curious nuisance).

1.3 CONTROL AND DIVERSION OF WATER AND DEWATERING

- A. 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.

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1.4 EROSION AND SEDIMENT CONTROL

- A. Erosion controls shall be placed as shown on the Drawings or as directed by the Owner or the Engineer. Controls shall be installed, periodically inspected, maintained and ultimately removed in accordance with the Drawings and specifications.
- B. The Contractor shall be responsible for installing and maintain erosion and sedimentation control measures in accordance with applicable sections of the Rhode Island Soil Erosion and Sediment Control Handbook.

1.5 DUST CONTROL

- A. Execute work by methods to minimize raising dust from construction operations.
- B. Provide positive means to prevent air-borne dust from dispersing into atmosphere, such as spraying water and/or applying calcium chloride.

1.6 NOISE CONTROL

- A. The Contractor shall coordinate and schedule all work, which will contribute to increased noise levels in residential areas with the Engineer and Owner. This shall be done with sufficient time to allow the Owner to notify the residents.
- B. The Contractor shall work utilizing methods to minimize excess background noise whenever possible.
- C. In no case shall work resulting in increased noise levels be performed prior to 7:00 a.m. or after 3:00 p.m., without written authorization of the Owner.

1.7 POLLUTION CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.

1.8 TRAFFIC CONTROL

- A. Refer to Section 01570, Traffic Regulation.
- B. Traffic control shall be provided in accordance with the Rhode Island Department of Transportation specifications and details, the Contract Drawings and the Manual on Uniform Traffic Control Devices (MUTCD).

1.9 PROGRESSIVE CLEANING

- A. As project progresses, maintain areas free of waste materials, debris and rubbish. Interim measures shall be undertaken to maintain a clean site while work progresses.

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- B. Sweep all paved surfaces disturbed by construction activity daily and prior to opening to vehicular or pedestrian traffic.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

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SECTION 01510

PROTECTION OF EXISTING FACILITIES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The work in this section includes the protection of existing utilities, trees and plantings, and archaeological and paleontological finds, susceptible to effects from the construction operations.
- B. Related Work Described Elsewhere:
 - 1. Section 01500, Temporary Facilities
 - 2. Section 01501, Temporary Controls
 - 3. Section 02530, Restoration of Curb, Sidewalks and Vegetated Areas
 - 4. Section 02650, Support of Existing Utilities

1.2 CONTRACTOR SUBMITTALS TO ENGINEER

- A. Copies of correspondence with utilities impacted by construction.
- B. Copies of all correspondence with property owners affected by construction.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION

3.1 PROTECTION OF WORK AND PROPERTY

- A. The Contractor shall:
 - 1. Perform Work within right-of-way and easements in a systematic manner that minimizes inconvenience to property owners and the public.
 - 2. Not cut off any residence or business from vehicular traffic for a period exceeding 1 hour unless special arrangements have been made.
 - 3. Maintain in continuous service all existing oil and gas pipelines; underground power, telephone or communication cable; water service; drainage lines; irrigation lines; sewers; poles and overhead power; and all other utilities encountered along the line of work, unless other arrangements satisfactory to owners of said utilities have been made.
 - 4. Coordinate all activities with owner of said utility and perform all work to their satisfaction where completion of Work requires temporary or permanent removal and/or relocation of an existing utility.
 - 5. Protect, shore, brace, support, and maintain underground pipes, conduits, drains, and other underground utility construction uncovered or otherwise affected by construction operations.
 - 6. Keep fire hydrants and water control valves free from obstruction and available for use at all times.
 - 7. In areas where Contractor's operations are adjacent to or near a utility such as gas, telephone, television, electric power, water, sewer, or irrigation system and such operations may cause damage or inconvenience, suspend operations until arrangements necessary for protection thereof have been made by Contractor.

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8. Notify property owners and utility owners that may be affected by construction operations at least 2 days in advance. Before exposing a utility, the Contractor shall obtain the utility owner's permission. Should service of utility be interrupted due to the Contractor's operation, the Contractor shall notify the proper authority immediately. He shall cooperate with said authority in restoring service as promptly as possible and bear costs incurred.
 9. Not impair operation of existing sewer systems, and shall prevent construction material, pavement, concrete, earth, volatile and corrosive wastes, and other debris from entering sewers, pump stations, or other sewer structures.
 10. Maintain site drainage at all times.
- B. For all trees and plantings the Contractor shall:
1. Protect from damage and preserve trees, shrubs, and other plants outside the limits of the Work and within limits of the Work, which are designated on the Drawings to remain undisturbed.
 2. Conduct sidewalk work in accordance with Section 02530. All work affecting/impacting trees shall be coordinated with Owner and Engineer in advance.
 3. The Contractor shall:
 - a. Employ hand excavation as necessary to prevent tree injury.
 - b. Not stockpile materials or permit traffic within drip lines of trees.
 - c. Provide and maintain temporary barricades around trees.
 - d. Water vegetation as necessary to maintain health.
 - e. Cover temporarily exposed roots with wet burlap, and keep the burlap moist until soil is replaced around the roots.
 - f. Not remove trees, except those specifically shown on Drawings to be removed.
 - g. Dispose of removed trees in a legal manner off the site.
 - h. Not burn trees or waste materials.
 4. Ball and burlap trees that are to be moved and replanted shall be done in conformance with the recommended specifications set forth in the American Standards for Nursery Stock, published by American Association of Nurserymen. All balls shall be firm and intact. Handle ball and burlap trees by the ball and not by the top.
 5. In the event of damage to bark, trunks, limbs, or roots of plants that are not designated for removal, treat damage by corrective pruning, bark tracing, application of a heavy coating of tree paint, and other accepted horticultural and tree surgery practices to the satisfaction of Owner and Engineer.
 6. Replace each plant that was to remain but dies as a result of construction activities.
- C. Existing Structures: Where Contractor contemplates removal of small structures such as mailboxes, signposts, and culverts that interfere with the Contractor's operations, he shall obtain approval of the property owner and Engineer. Replace those removed in a condition equal to or better than original.
- D. For any archaeological and paleontological finds the following conditions are in effect:
1. The Contractor shall immediately notify the Owner and Engineer and proceed in accordance with the Contract Agreement should finds of an archaeological or paleontological nature be made within the limits of the site. Continue Work in other areas without interruption.

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2. Archaeological Finds are defined as evidence of human occupation or use of an area within the contract limits prior to the Year 1680. Evidence may consist of skeletons, stone, or other utensils, or evidence of habitations or structures.
 3. Paleontological Finds are defined as evidence of prehistoric plant or animal life, such as skeletons, bones, fossils, or casts and other indications such as pictographs.
 4. Owner or Engineer may order Work stopped in other areas if it is determined that the find is more extensive than may appear from uncovered material.
 5. The Contractor shall provide protection of finds as follows:
 - a. Cover, fence, or otherwise protect finds until notice to resume Work is given.
 - b. Cover finds with plastic film held in place by earth, rocks, or other weights placed outside the find. Should additional backfilling be necessary for safety or to prevent caving, place backfill material loosely over the plastic film.
 - c. Sheet or shore as necessary to protect excavations underway. Place temporary fence to prevent unauthorized access.
 - d. Dewater finds made below the water table as necessary to protect construction Work underway. Divert groundwater or surface runoff away from find by ditching or other acceptable means.
 6. The Contractor shall abide by the following requirements regarding removal of finds:
 - a. Unless otherwise determined by Owner, all finds are the property of the State of Rhode Island or local municipality. Do not remove or disturb finds without the Owner's written authorization.
 - b. Should Owner elect to have a find removed, provide equipment, labor, and material to permit the safe removal of the find without damage. Provide transportation for delivery to individuals, institutions, or other places as the Owner may find desirable, expedient, or required by law.
- E. For endangered species the Contractor shall abide by the following:
1. Take precautions necessary and prudent to protect native endangered flora and fauna.
 2. Notify Engineer of construction activities that might threaten endangered species or their habitats.

END OF SECTION

PART 1 - GENERAL

1.1 SECURITY PROGRAM

- A. Protect work from theft, vandalism and unauthorized entry.
- B. Initiate program at contractor mobilization.
- C. Maintain program throughout construction period until Owner acceptance precludes the need for contractor security.
- D. The Contractor and Subcontractors are wholly responsible for the security of their site office, storage compound, and laydown area for all its plant, material, equipment and tools at all times.
- E. The Contractor's overall security program must be coordinated with the Owner's security system, as specified herein. All personnel are required to abide by the Owner's security system.

1.2 ENTRY CONTROL

- A. Allow entrance to assigned work and staging areas only to authorized persons.

1.3 PROHIBITED ITEMS OR ACTIONS

- A. The following restrictions apply to all project personnel while on the project site. Failure to comply will be cause for dismissal or denial of access to the Project.
- B. Prohibited Items or Actions
 - 1. Firearms and lethal weapons.
 - 2. Possession of alcoholic beverages, non-prescription depressant or stimulant drugs, and being under the influence thereof. Any persons under the influence or in possession of either alcohol or non-prescription or illegal drugs shall be immediately removed from the project and will be subject to permanent access denial and/or dismissal.
 - 3. Gaming devices and the use thereof, including but not limited to playing cards, dice, etc.
 - 4. Sabotage, vandalism, or negligently operating equipment or vehicles.
 - 5. Fighting. Participants will be subject to immediate removal and/or dismissal.
 - 6. Theft of unauthorized removal of tools or material.
 - 7. Failure to use sanitary facilities.
 - 8. Entering unauthorized areas.
 - 9. Violating safety rules.
 - 10. Making false statements or falsifying records or reports.
 - 11. Horseplay.
 - 12. Littering.
 - 13. Negligently damaging property of the Owner.
 - 14. Hot plates, stoves or open fires.

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PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

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SECTION 01570

TRAFFIC REGULATION

PART 1 - GENERAL

1.1 SCOPE

- A. This Section specifies the general requirements for traffic regulation, minimum performance criteria for maintenance and protection of traffic, road closures, and coordination with other parties for the duration of the Work.
- B. The Contractor shall be responsible for the maintenance and protection of traffic on public roadways impacted by its operations for the duration of the Work. The Contractor shall bear all costs for designing, furnishing, and maintaining traffic control facilities for the duration of the work.
- C. The Contractor shall obtain permission from the Owner and Engineer to deviate from the requirements provided on the Drawings and specifications relative to temporary protection and control of traffic in the work area. Contractor is made aware that traffic control requirements as provided on the Drawings and specifications have been coordinated with the City of Pawtucket. Contractor should not assume that the City will permit changes to the traffic control requirements included in the Contract Documents.
- D. Detours shall not be permitted unless written approval has been received from the City. The Contractor shall notify the City 48 hours in advance of detour. If a detour is used, the Contractor shall remove detours and open the work area up to normal traffic at the end of each workday unless otherwise allowed by Owner. Open excavations shall be kept to a minimum, and all open excavations shall be protected with steel plates at the end of each working day. Trenches shall be backfilled to grade at the end of each workday whenever possible. In deep sections of sewer and drainage, where trenching, pipe installation, and backfill to grade may not be possible in one workday, Contractor shall protect the work area with concrete barriers and maintain one lane of travel in each direction as shown in the Drawings, until backfill operations are complete.
- E. Trenches shall be restored with temporary pavement by the end of each work week. Contractor shall monitor weather forecasts and schedule temporary paving operations accordingly.
- F. The Contractor shall make provisions to provide access for residents along the project area and shall maintain emergency vehicle access through the project area at all times.
- G. The Contractor shall coordinate its traffic control facilities with the schedule restrictions and construction operations of other parties as specified herein and in other sections of these specifications.
- H. Related work described elsewhere:
 - a. Section 01501, Temporary Controls
 - b. Section 01576, Policing

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1.2 REFERENCE STANDARDS

- A. Federal Highway Administration, Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition.
- B. Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction, latest revision.

PART 2 - PRODUCTS

2.1 TRAFFIC DEVICES AND MARKINGS

- A. Traffic devices and markings shall conform to Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction Divisions I & III and the FHWA Manual on Uniform Traffic Control Devices (MUTCD), latest edition.

2.2 TRAFFIC CONTROL FACILITIES

- A. Temporary traffic control equipment shall be furnished by the Contractor at the start of construction, adjusted as needed throughout the course of the Work and removed or restored at the completion of the Work and shall include, but shall not be limited to traffic barriers, channelizing devices, signage, re-striping, work zone warnings and flashing arrow boards.
- B. The Contractor shall restore all public highways and traffic control devices to a condition equal to or better than that which existed prior to the Work.

PART 3 - EXECUTION

3.1 MAINTENANCE OF TRAFFIC AND TRAFFIC CONTROL DEVICES

- A. The Contractor shall maintain existing traffic flows to all areas adjacent to the work areas. The Contractor shall not close or obstruct any portion of a street, road, or private way that shall be rendered unsafe by the Contractor's operations.
- B. Streets, roads, private ways, and walks that are not temporarily closed shall be maintained passable and safe by the Contractor, who shall assume and have full responsibility for adequacy and safety of provisions made, therefore.
- C. The Contractor shall notify Owner and Engineer at least 48 hours in advance of required or requested modifications to traffic control. The Contractor shall implement the detour approved by the City of Pawtucket as shown in the Drawings and shall coordinate with the City of Pawtucket Police and Fire Department.
- D. Throughout the duration of the Work, the Contractor shall maintain all temporary and permanent traffic control facilities, signs, barricades and other protective devices in a sturdy, clean, legible condition. The Contractor shall cover or remove signs not in use. Signage removal shall include all channel iron, irrespective of contractor's intent to reuse

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the sign in the future. Maintenance of devices will include repairing; adjusting; washing; repainting, and the re-application of reflective sheeting.

- E. Care shall be exercised such that weeds, shrubbery, and construction materials, equipment, and spoils do not obscure the message of any sign, light, or barricade.
- F. No defective and/or damaged devices shall be installed. Devices showing defects or damage shall be either repaired or removed and replaced at no additional cost to the Owner.
- G. Any and all costs, including Owner and Engineers costs, of fines levied for violation of any permit requirements which are a direct result of Contractor's performance or non-compliance with issues, permits, or applicable regulations shall be paid by Contractor at no cost to the Owner.
- H. 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.
- I. 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.
- J. The Contractor shall keep all signs in proper position, clean and legible at all times. Care shall be taken so that weeds, shrubbery, and construction materials, equipment, or spoils 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.
- K. The Contractor shall cover or remove signage prior to any extended work shutdown. An extended work shutdown shall be defined as a planned absence from construction locations of two weeks or more.
- L. 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.
- M. 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.
- N. Whenever work is deemed to be a hazard to public safety uniformed officers shall be used. Additional information is provided and shall be in accordance with Section 01576, Policing.

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3.2 PARKING

- A. The Contractor shall be responsible for managing employee parking throughout the duration of the Contract. The Contractor shall secure and establish parking at work site in a legal and safe manner that does not adversely affect traffic flows on public roads.
- B. The Contractor is responsible for all cost associated with no parking postings.

3.3 ROAD MAINTENANCE AND SITE ACCESS

- A. Contractor shall establish entrances and exits to the site that are acceptable to Owner and Engineer.
- B. The Contractor shall retain the services of a street sweeper to remove all muck and dust tracked onto public roadways due to its operations. Sweeping shall be conducted to the satisfaction of the Engineer in accordance with Section 01501, Temporary Controls.

END OF SECTION

**CITY OF PAWTUCKET
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SECTION 01576

POLICING

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. Contractor shall make all arrangements for obtaining the necessary manpower for direction of traffic by uniformed officers, when the work has been deemed a hazard to the public safety, from the City of Pawtucket Police Department. All costs for policing will be paid by the Owner except those additional costs incurred due to negligence or abnormalities with scheduling of police details, as described in Section 01025 – Measurement and Payment. Invoices shall be collected by Contractor and submitted to Owner for reimbursement. The Contractor shall pay all incidental costs related to the coordination for these services.
- B. The intent is to ensure public safety by police direction of traffic. Police are not to serve as watchmen to protect the Contractor's equipment and materials, or to warn pedestrians of such hazards as open trenches.
- C. Nothing contained herein shall be construed as relieving the Contractor of any of his responsibilities for protection of persons and property under the terms of the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

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SECTION 01600

MATERIALS AND EQUIPMENT

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Install equipment and materials as specified and as indicated in accordance with the “Standard Specifications for Road and Bridge Construction,” of the Rhode Island Department of Transportation, latest revision, herein referred to as the “State Standards,” the requirements of the specification sections in the General and Supplementary Conditions, Divisions 2, and in accordance with the general installation requirements specified herein.
- B. Provide transportation, handling, storage, and protection of all materials and equipment as specified herein.
- C. Material and equipment incorporated into the Work:
 - 1. Material incorporated into the work shall be American-made and shall be in accordance with the Build America Buy America Act.
 - 2. Conform to applicable specifications and standards.
 - 3. Comply with size, make, type and quality specified, or as specifically approved in writing by the Engineer.
 - 4. 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.
 - 5. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

1.2 RELATED REQUIREMENTS

- A. General Requirements of the Contract.

1.3 REUSE OF EXISTING MATERIAL

- A. Except as specifically indicated or specified, materials and equipment removed from existing structures or utilities 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 completed Work.

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2. Arrange for transportation, storage, and handling of products which require off-site storage, restoration or renovation. Pay all costs for such work.

1.4 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.

1.5 TRANSPORTATION AND HANDLING

- A. Arrange deliveries of Products in accord with construction schedules and coordinate deliveries 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.

1.6 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 to prevent soiling or staining. Cover products which are subject to deterioration with impervious coverings and provide adequate ventilation to avoid condensation.

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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 signage 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.

1.7 SUBSTITUTION 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 for product substitution.
- 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. Any required license fee or royalties.
 - e. Availability of maintenance service, and source of replacement materials.
 3. Engineer shall be the judge of the acceptability of the proposed substitution.

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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 substitution completely in all respects.
- d. Waives all claims for additional costs, under their 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

2.1 PRODUCTS

- A. Do not use materials and equipment removed from existing premises, except as specifically required by the Contract Documents.
- B. Where similar Products (such as grease fittings, flexible couplings, etc.) are used on different pieces of equipment or in different areas within the Work, standardize the Products by providing all Products from the same supplier.

PART 3 - EXECUTION

3.1 TRANSPORTATION, DELIVERY, AND HANDLING

- A. Transport and handle items in accordance with manufacturer's instructions.
- B. Schedule delivery to reduce long term on-site storage prior to installation and/or operation. Under no circumstances shall equipment be delivered to the site more than one month prior to installation without written authorization from the Engineer.
- C. Coordinate delivery with installation to ensure minimum holding time for items that are hazardous, flammable, easily damaged or sensitive to deterioration.
- D. Deliver products to the site in manufacturer's original sealed containers or other packing systems, complete with instructions for handling, storage, unpacking, protecting and installing.
- E. All items delivered to the site shall be unloaded and placed in a manner which will not hamper the Contractor's normal construction operation or those of subcontractors and other contractors and will not interfere with the flow of necessary traffic.
- F. Provide necessary equipment and personnel to unload all items delivered to the site.
- G. Promptly inspect shipment to assure that products comply with requirements, quantities are correct, and items are undamaged. Notify Engineer verbally, and in writing, of any problems.

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3.2 STORAGE AND PROTECTION

- A. Store and protect products in accordance with the manufacturer's instructions, with seals and labels intact and legible.
- B. At least 30 days prior to storing equipment, submit to the Engineer for approval a protective maintenance schedule based on Supplier's instructions, detailing proposed procedures for each piece of equipment placed into storage. On equipment placed in storage, permanently attach equipment maintenance record card. The record card shall indicate the protective procedure to be taken, the date work is actually performed, and signature of the Contractor's technician actually performing the work. Equipment will not be approved for release from storage unless all record cards are signed and dated.
- C. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- D. Cement and lime shall be stored under a roof and off the ground and shall be kept completely dry at all times. All structural, miscellaneous, and reinforcing steel shall be stored off the ground or otherwise to prevent accumulations of dirt and grease, and in a position to prevent accumulations of standing water and to minimize rusting. Beams shall be stored with the webs vertical. Precast concrete shall be handled and stored in a manner to prevent accumulations of dirt, standing water, staining, chipping or cracking. Brick, block and similar masonry products shall be handled and stored in a manner to reduce breakage, cracking and spalling to a minimum.
- E. All mechanical and electrical equipment and instruments subject to corrosive damage by the atmosphere if stored outdoors (even though covered by canvas) shall be stored in a weathertight building to prevent injury. The building may be a temporary structure on the site or elsewhere, but must be satisfactory to the Engineer. Building shall be provided with adequate ventilation to prevent condensation. Maintain temperature and humidity within range required by manufacturer.
 - 1. All equipment shall be stored fully lubricated with oil, grease, and other lubricants unless otherwise instructed by the manufacturer.
 - 2. Moving parts shall be rotated a minimum of once weekly to insure proper lubrication and to avoid metal-to-metal "welding". Upon installation of the equipment, the Contractor shall start the equipment, at least half load, once weekly for an adequate period of time to ensure that the equipment does not deteriorate from lack of use.
 - 3. Lubricants shall be changed upon completion of installation and as frequently as required thereafter during the period between installation and acceptance. New lubricants shall be put into the equipment at the time of acceptance.
- F. Prior to installation of the equipment, Contractor shall have the manufacturer inspect the equipment and certify that its condition has not been detrimentally affected by the long storage period. Such certifications by manufacturer shall be deemed to mean that equipment is judged by the manufacturer to be in a condition equal to that of equipment that has been shipped, installed, tested and accepted in a minimum time period. As such, manufacturer will guaranty the equipment equally in both instances. If such a certification is not given, the equipment shall be judged to be defective. It shall be removed and replaced at Contractor's expense.

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- G. All materials which, in the opinion of the Engineer, have become so damaged as to be unfit for the use intended or specified shall be promptly removed from the site of the work and the Contractor shall receive no compensation for the damaged material or its removal.
- H. Storage locations must be approved by the Engineer.

3.3 GENERAL MATERIAL AND EQUIPMENT INSTALLATION REQUIREMENTS

- A. These requirements shall constitute the acceptable minimum standards for installing the equipment specified herein. Should these requirements conflict with the Supplier's recommendations or in any way be less stringent than the Supplier's requirements, they shall be superseded by the Supplier's requirements.
- B. Sleeves and Openings
 1. Provide all chases or openings for the installation of the Work, or cut the same in existing Work. Provide all sleeves or forms at the Work, and set them as indicated and as specified, and in ample time to prevent delays. Locate all chases, openings, and sleeves as specified and indicated. If the location is not specified or indicated locate all openings to avoid interference with equipment and piping.
 2. If these openings and/or sleeves were not provided prior to concrete placements, the Contractor shall provide and set them afterwards at no additional cost to the Owner. Confine the cutting to smallest extent possible. In no case shall piers or structural members be cut without the written consent of the Engineer.
 3. Fit around, close up, repair, patch, and point around the work specified herein to the satisfaction of the Engineer.
 4. Perform all of this work by workman using small hand tools. Do not use power tools except where, in the opinion of the Engineer, the type of tool proposed can be used without damage to any work or structures and without interference with the operation of any facilities. The Engineer's concurrence with the type of tools shall not in any way relieve or diminish the responsibility of the Contractor for such damage, or interference resulting from the use of such tools.
 5. Do not cut or alter the work of any subcontractor or any other contractor, nor permit any subcontractor to cut or alter the work of any other contractor or subcontractor, except with the written consent of the contractor or subcontractor whose work is to be cut or altered, and with the written consent of the Engineer. All cutting and patching or repairing made necessary by the Contractor or any subcontractors shall be done at no additional cost to the Owner.

END OF SECTION

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. This Section specifies administrative and procedural requirements for project closeout, including but not limited to:
 - 1. Closeout procedures.
 - 2. Final cleaning.
 - 3. Adjusting.
 - 4. Project record documents.
 - 5. Spare parts and maintenance materials.
- B. Contract closeout shall verify the construction work is complete and in conformance with the plans and specifications, and shall permit the formal contract documentation to be completed.

1.2 DEFINITION

- A. Contract Closeout is a planned series of activities that shall verify the construction and installation work for the Contract.
- B. The Contract Closeout will be comprised of the following components:
 - 1. Substantial Completion.
 - 2. Final Completion.
 - 3. Guarantee Period.

1.3 SUBSTANTIAL COMPLETION

- A. As soon as practical after the initial start-up, the Contractor shall arrange for the manufacturers' representatives to perform all field tests and complete all additional training.
- B. There will be a date of substantial completion certified by the Engineer for each Phase of construction. These dates will not be certified until the following requirements have been satisfied by the Contractor:
 - 1. All Contract requirements are coordinated into a fully operational system. All individual units of equipment and treatment are fully operative and performing at specified efficiencies. Where efficiencies are not specified, performance must meet acceptable standards for the particular unit.
 - 2. All field tests have been completed and satisfactorily reports forwarded to the Engineer.
 - 3. All final training has been completed by the manufacturers' representatives.
 - 4. All spare parts and lubricants have been satisfactorily delivered to the Owner.

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1.4 FINAL COMPLETION

- A. Prior to final completion, the following tasks must be completed:
 - 1. All items in the punch list must be completed.
 - 2. The Contract closeout documentation must be submitted to and approved by the Engineer.
 - 3. A response plan to address warranty issue must be submitted to and approved by the Engineer.

1.5 GUARANTEE PERIOD

- A. During the warranty guarantee period, the Contractor shall correct all deficiencies.
- B. Corrective work will be identified by the Engineer. The Contractor will be notified of the item(s) requiring corrective work.
- C. The Contractor shall begin work on all corrective work within 72 hours of being notified of the deficiency by the Engineer and will then work continuously until the deficiency is corrected. Upon completion of the corrective work, the contractor shall submit a letter report to the Engineer detailing a description of the deficiency and the corrective action that was taken. If the Contractor does not begin work within 72 hours of being notified, or does not then work continuously to correct the work, the Owner may have the work completed by others and have all costs deducted from money they would otherwise be due to the Contractor.
- D. The Contractor will coordinate all corrective work with the Engineer and the Owner.

1.6 RECORD DOCUMENTS

- A. Maintain on site, two sets of the following documents; actual revisions to the Work shall be recorded in these documents:
 - 1. Contract Drawings.
 - 2. Specifications.
 - 3. Addenda
 - 4. Change Orders and other Modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
 - 6. Written interpretations and clarifications.
 - 7. Field Orders.
 - 8. Field test reports properly verified.
 - 9. Photographs.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:

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1. Manufacturer's name, address and telephone number and product model and serial number.
2. Product substitutions or alternates utilized.
3. Changes made by Addenda and Modifications.

E. Record Drawings:

1. The Contractor shall be responsible for maintaining two (2) sets of redline record drawings during construction and delivering completed electronic files and Mylars of the record drawings before Contract completion.
2. The data shall be collected on a continuous basis by a licensed surveyor employed by the Contractor. The as-bid electronic drawing files will be provided to the Contractor by the Owner.
3. Prior to the start of collecting record electronic data the surveyor shall meet with the Owner to establish electronic layering, file structure, etc.
4. All elevations will be NGVD 29 and will be to the nearest 0.01 feet.
5. All horizontal coordinates will be in the Rhode Island State Plane coordinate system.
6. "RECORD DRAWINGS" in a minimum of 40-font shall be placed on every drawing.
7. As a minimum, the record information and documentation to be collected shall include the following items.
 - a. Yard Piping
 - i. Horizontal coordinates and rim elevations for the covers on manholes and other structures.
 - ii. Invert elevations in and out of each manhole.
 - iii. Changes in pipe size.
 - iv. Changes in pipe material.
 - v. The type, size, depth, material and other pertinent data for utilities crossed.
 - vi. Location and approximate lip and cut-off elevations of sheeting left in place.
 - vii. Any other notes necessary to provide relevant information.
 - viii. Structures that have changed shall be re-drawn to scale with corrected values for dimensions and elevations.
 - ix. The pipe profile shall be re-drawn if the slope or structure locations change significantly. Each profile should contain a vertical datum reference and a scale.
 - x. The pipe plan shall be re-drawn if the alignment or locations of appurtenances such as manholes, valve, bends or cleanouts change significantly. Pipe plan view shall include a minimum of 2 viewable "ties" and associated coordinate values to demonstrate the coordinate system the plans are drawn in. Each plan shall contain a datum reference and a scale.
 - xi. Notes that make the Record Drawings confusing (i.e., "proposed", etc.) shall be deleted.
 - b. CORs and RFIs
 - i. Only as they apply to the above.
8. The Record Drawings shall be reviewed monthly at the project meeting.
9. Contractor shall ensure that all subcontractors maintain and prepare record drawings for their respective areas of work. Contractor shall review all subcontractor record drawing

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information to ensure accuracy and completeness. Subcontractor's record drawing information shall be incorporated into the drawings.

10. The Contractor shall submit copies of field records and record drawings each month with project invoices. The Contractor shall include an item for record drawings in the Schedule of Values required in Section 01370 which shall be pro-rated across the construction duration. Failure to submit or maintain record drawings shall be cause for rejection or reduction in partial payment requests.
11. Prior to Contract completion the Contractor shall deliver the completed Record Drawings to the Owner in electronic CAD files and individual Mylar sheets.

F. Submit documents to Engineer with claim for final Application or Payment.

1.7 CLOSEOUT PROCEDURES

- A. Submit electronic certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Engineer's and Owner's inspection.
- B. Accompany Engineer and Owner in inspection to verify conformance with the Contract Documents. Prepare a punch list of work items that have been determined by inspection to not conform with Contract Documents. Punch list items will include work items that are missing, incomplete, damages, not the correct item, or improperly installed or constructed. The Contractor shall correct the punch list items by re-work, modification, or replacement, as appropriate, until the items do conform to the Contract Documents. The initial punch list shall be produced by the Contractor, and submitted electronically to the Engineer and Owner. When the Contractor has reduced the level of outstanding items to a reasonable level, the Engineer will develop a definitive punch list for the use of the Contractor.
- C. Provide electronic submittals to Engineer that are required by governing or other authorities.
- D. Submit final Application for Payment electronically identifying total adjusted Contract Sum, previous payments, and sum remaining due. The Contractor shall submit the following documents with or prior to Final Application for Payment: Contract Completion and Acceptance Certificate, Consent of Surety to Final Payment, Release and Waiver of Liens and Claims, Affidavit of Payment of Debts and Claims, and remaining releases, waivers, guarantees, and all data required by the Contract Documents.

1.8 FINAL CLEANING

- A. Complete the following cleaning operations before requesting inspection for Certification of Substantial Completion:
 1. Clean the site, including landscape development areas of rubbish, litter and other foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.

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2. Remove waste and surplus materials, rubbish, fencing equipment, temporary utilities and construction facilities from the site, unless otherwise directed by the Engineer.
3. Grade site to provide drainage flow to an approved catch basin or drainage system.

1.9 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

DIVISION 2

SITE

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SECTION 02005

MOBILIZATION AND DEMOBILIZATION

PART 1.00 - GENERAL

1.01 WORK INCLUDED

- A. This section covers the work necessary to move in personnel and equipment, set up Contractor's temporary facilities, utilities, prepare the site for construction, and demobilize.
- B. Related Sections include the following:
 - 1. Section 01500, Temporary Facilities
 - 2. Section 01501, Temporary Controls
 - 3. Section 01570, Traffic Regulations
 - 4. Section 02764 Television Inspections

1.02 REFERENCES

- A. All work specified in this Section shall conform to the "Standard Specifications for Road and Bridge Construction" of the Rhode Island Department of Transportation, latest revision, herein referred to as the "State Standards," excluding the provisions of Part 100- General Requirements and Covenants and any reference to measurement and payment.

1.03 GENERAL

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. The limits of the site and areas designated for Contractor staging are shown on the drawings.
- C. The extent of the limits of work shown on the drawings. Any activities by the Contractor beyond the limits of work shall be the responsibility of the contractor to coordinate as necessary with the property owner.
- D. The extents of the existing easements, if any, obtained by the Owner are designated on the Drawings. Copies of access agreements will be provided prior to the start of construction.
- E. In the event additional space is required for the Contractor's operations, the Contractor shall make its own arrangements and pay for such additional space at no additional cost to the Owner.

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PART 2.00 PRODUCTS

2.01 TEMPORARY FACILITIES

- A. The Contractor shall obtain necessary permits, coordinate, and provide all temporary facilities as required for performing the work, including any facilities specified for the Owner's or the Engineer's use.

2.02 SECURITY FENCE

- A. Construct temporary security fence(s) as required for the protection of the Contractor's materials, tools, and equipment. Maintain fence(s) during construction.

2.03 TREE PROTECTION

- A. Construct temporary tree protection fences and/or devices as required at locations as shown on the plans or as directed by the Engineer.

2.04 PARKING FACILITIES

- A. Provide parking facilities for Contractor, Owner, and Engineer personnel working on the project, as specified in Section 01570, Traffic Regulation.

2.05 POST CONSTRUCTION CCTV

- A. Conduct post-construction CCTV of the newly installed drainage and sewerage systems as specified in Section 02764 Television Inspections.

PART 3.00 EXECUTION

3.01 LAYOUT

- A. Set up construction facilities in a neat and orderly manner within the Contractor's staging area and at a location acceptable to the Owner. Accomplish all required work in accordance with applicable portions of these Specifications. Confine operations within the general work limits shown.

3.02 DEMOBILIZATION

- A. At the completion of the work and immediately prior to final inspection, clean the entire project area removing all debris, soil, and rubbish.
 - 1. Should Contractor not remove rubbish or debris or not clean the facilities and site as specified above, the Owner reserves the right to have final cleaning done by others at the sole expense of the Contractor.

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B. The Contractor shall:

1. Employ experienced workers or professional cleaners for final cleaning.
2. Conduct final inspection of concealed spaces in preparation for Contract completion.
3. Remove from the property temporary structures and materials, equipment, and appurtenances not required as part of, or appurtenant to, the completed work.
4. Leave watercourse, gutters, and ditches open and in condition satisfactory to Owner and/or Engineer.

C. At the completion of the work, the Contractor shall:

1. Restore all fencing, signs, areas disturbed outside of the roadway and walkways that have been removed, disturbed or damaged.
2. Restore all roadways and disturbed areas to preconstruction condition.
3. Clean all roadways and stormwater drainage systems of accumulated sediment.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Requirements to maintain existing flow and implement and complete all flow diversions and/or bypass pumping required to complete the Work indicated on the Drawings.

1.2 PERFORMANCE REQUIREMENTS

- A. It is essential to the operation of the existing sewerage and drainage systems that there be no interruption of the wastewater and stormwater flow throughout the duration of this project. An interruption shall be considered, but may not be limited to, any condition that in the sole opinion of the Engineer adversely affects or alters operation of the existing sewage and drainage systems and/or any other portion or component of the existing collection systems including the associated flows; allows the level of sewerage and drainage flow to increase, rise, collect, surcharge and/or overflow existing facilities in any manner; or results in any operational or permit violations being issued to the Owner.
- B. The Contractor shall provide, maintain, and operate temporary facilities such as dams, bulkheads, pumping equipment (both primary and backup units as required), conduits, electrical power, and all other labor and equipment to intercept and maintain the existing sewage flow before it reaches the point where it would interfere with his work, carry it past his work, and return it to the existing facilities beyond his work.
- C. The Contractor's attention is directed to the fact that the existing wastewater and stormwater flows are mostly the result of separate systems, but there may be illicit connections to the sanitary sewer that Owner is unaware of. Increases in normal flow may be expected during periods of wet weather. The Contractor shall therefore take all precautions necessary including monitoring weather forecasts to fully accommodate, control, and sufficiently handle the increases in flow during periods of wet weather and/or storms as well as periods of normal flow.
- D. The Engineer may prohibit the carrying out of any work at any time when in his sole judgment increased flow conditions are unfavorable or not suitable, or at any time regardless of the existing flows when proper precautions are not being taken to safeguard the existing sewerage and drainage systems, previously constructed work, work in progress, and/or the general public.
- E. 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 or Engineer may require, at no additional expense to the Owner.
- F. The Contractor shall maintain the existing sanitary sewer flow at all times. The Contractor may provide a system capable of bypassing all expected flow to complete the work.

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G. 1.3 SUBMITTALS

- A. In accordance with the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2, submit the following:
1. Detailed plans and descriptions outlining all provisions and precautions to be taken regarding the control and handling of existing sewage and drainage flows.
 2. Include such items as schedules, locations, elevations, capacities of equipment, materials, traffic maintenance plans, and all other incidental items necessary and/or required by the Engineer to ensure proper protection of the facilities and compliance with the requirements herein specified.
 3. Qualifications as described herein.
 4. Detailed proposal for noise prevention measures for review.
 5. Shop drawings for all pumping, piping, and appurtenances for type and size of equipment required to perform the flow diversion as required herein.

1.4 QUALITY ASSURANCE

A. Qualifications

1. The design, installation and operation of any temporary pumping system shall be the Contractor's responsibility. The Contractor shall employ the services of a vendor who can demonstrate to the Engineer that he specializes in the design and operation of temporary bypass pumping systems. The vendor shall provide at least five (5) references of projects of similar size and complexity in wastewater applications performed by his firm within the past three years within New England. The bypass system shall meet the requirements of codes and regulatory agencies having jurisdiction.
2. The vendor shall demonstrate the bypass pumping equipment is automated and is capable of functioning without the assistance of an operator.
3. The vendor shall demonstrate the pumping equipment can operate for an extended period of time running dry. After this period of time, the pump shall have the capability of pulling a 25" Hg vacuum without adjustment or repair.
4. The vendor shall demonstrate sufficient service resources and repair parts in stock to fulfill service or repair of rental equipment within one hour of a service call, twenty-four hours per day, seven days per week.
5. Temporary components of the bypass system including pumps, pipe, hose, valves, and fittings shall be provided by one bypass vendor. Hydraulic calculations and drawings required by the submittals shall be provided by the bypass vendor and stamped and certified by a Professional Engineer licensed in the State of Rhode Island.

B. Pre-Installation Meeting

1. Contractor to schedule and attend a pre-installation meeting with the vendor, Owner, Narragansett Bay Commission and/or Providence Water, as appropriate, and Engineer prior to installation of by-pass system.

PART 2 – PRODUCTS

2.1 GENERAL

- A. At a minimum, all equipment shall be supplied in duplicate for emergency situations. Provide adequate on-line backup facilities so that no interruption in service is encountered. Equipment and installation are subject to the approval of the Owner and the Engineer.

2.2 PUMPING SYSTEM(S)

- A. All pumping units (primary and secondary) and appurtenances shall be sized properly to handle the flows encountered including increased flows due to wet weather.
- B. Pumps shall be centrifugal, end suction, fully automatic self-priming pumps that do not require the use of foot-valves, vacuum pumps, diaphragm pumps, or isolation valves in the priming system. The pumps may be electric, or diesel powered. Pumps must be constructed to allow dry running for long periods of time to accommodate the cyclical nature of effluent flows and shall immediately develop 25” Hg vacuum without adjustment or repair or employ level control devices to regulate on/off or variable speed of the pump. Pumps shall be CD low noise units as manufactured by Godwin Pump of America, Inc., or approved equal. All pumping units and appurtenances shall be sized in accordance with the design parameters provided. Pumps shall not be connected by a common suction manifold.
- C. Seals shall be high pressure, mechanical self-adjusting type with silicon carbide faces capable of withstanding suction pressures to 100 psi running. The mechanical seal shall be cooled and lubricated in an oil bath reservoir, requiring no maintenance or adjustment. Pump shall be capable of running dry, with no damage, for extended periods of time. All metal parts shall be of stainless steel. Elastomers shall be Viton.
- D. The Contractor shall provide the necessary start/stop controls for each pump.
- E. The Contractor shall be responsible to meet noise requirements specified elsewhere in this section. All diesel driven primary and standby pumps shall be sound attenuated. The use of Critical Silenced Canopy pumps or acoustical Whisper Pac enclosures for sound attenuation are required.

2.3 PIPING SYSTEM(S)

- A. All piping systems (primary and secondary) and appurtenance shall be sized properly to handle the flows encountered including increased flows due to wet weather.
- B. Provide temporary bypass suction piping from the upstream manhole(s) to the bypass pumps, and temporary discharge piping from the bypass pumps to the downstream discharge manhole(s).

2.4 POWER GENERATING FACILITIES

- A. Include power generating facilities capable of providing all power necessary to operate any primary and secondary pumping systems.
- B. Maintain facility to be ready for use if required.

2.5 NOISE PREVENTION

- A. Noise prevention measures for all equipment shall be used to insure minimum noise impact on surrounding areas.
- B. Measures may include but shall not be limited to enclosures, insulation, electric pumping units, and hospital grade silencers or mufflers.
- C. Noise levels shall be maintained such that increase shall not exceed 10 dBA over background at the nearest property line.
- D. Should at any time prior to or during the performance of above-mentioned work, the Engineer determines the noise prevention measures being used are not adequate, the Contractor shall at no additional cost to the Owner suspend all work until acceptable measures are incorporated.

PART 3 - EXECUTION

3.1 PUBLIC SAFETY AND CONVENIENCE

A. General

- 1. The Contractor shall at all times keep the streets, highways, roads, driveways, parking lots, private walks, and public sidewalks open for pedestrian and vehicular traffic unless otherwise authorized by the Owner/Engineer.

B. Public Travel Ways

- 1. Any authorized temporary closure of any streets, highways or roads shall be coordinated with Owner and Engineer as well as the local Fire, and Police.

C. Municipal, Commercial and Private Property

- 1. Any authorized, temporary closure of any municipal, commercial or private driveway or access route will require the Contractor provide a minimum 48-hour notice to abutters of the temporary restriction of access to their property. The Contractor shall make every attempt to schedule his work with as little inconvenience to the property owner as possible.

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3.2 INSTALLATION

- A. Keep the Engineer advised at all times of any changes made to the overall operation(s) to accommodate field conditions.
- B. Flow diversions and/or bypass pumping shall be maintained at all times as long as it is necessary to maintain the flow through the limits of the project during construction.
- C. Maintain auxiliary and/or emergency equipment at the site to continue flow diversion and/or by-pass pumping operations in the event of a breakdown and/or loss of normal power.
- D. The Contractor shall be responsible for the proper functioning and operation of the backup pumping units. Back-up pump(s) shall be on-line, isolated from the primary system by a valve.
- E. No work shall begin until all provisions and requirements of this Section have been reviewed and approved by the Engineer.
- F. The Engineer reserves the right to limit and/or otherwise restrict the Contractor's overall activities and/or operations at any time without claim should the Engineer deem it to be in the Owner's or public's best interest to do so.

END OF SECTION

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SECTION 02200

EARTHWORK

Part 1 - General

- 1.1 RELATED DOCUMENTS: Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- 1.2 REFERENCES
- A. All work specified in this Section shall conform to “Standard Specifications for Road and Bridge Construction” of the Rhode Island Department of Transportation, latest revision, herein referred to as “State Standards” excluding the provisions of Part 100- General Requirements and Covenants and any reference to measurement and payment.
- 1.3 SUMMARY
- A. This Section includes the following:
1. Excavating and backfilling for utility trenches.
 2. Geotextiles
- B. Related Sections include:
1. Section 02305, Support of Excavation and Dewatering
- 1.4 SUBMITTALS
- A. Product Data: For the following:
1. Geotextiles- Manufacturer’s certification of compliance attesting geotextiles meet the requirements of these specifications. Provide mill certificates stating the length and width of fabric contained on each roll and the manufacturer’s recommended installation procedure.
- B. Material Test Reports: From a qualified testing agency indicating and interpreting test results for compliance of the following with requirements indicated:
1. Gradation Test Results for each on-site and imported soil material proposed for fill and backfill.
 2. Laboratory compaction curve according to ASTM D 698 ASTM D 1557 for each on-site and imported soil material proposed for fill and backfill.
 3. Each submittal shall include the intended use for the material with the appropriate specification section and material name corresponding to the Contract Documents to facilitate review.
- C. Copies of permits obtained for excavations that are required by state and local governing authorities and local utility companies shall be submitted to the owner’s representative.
- D. Catalog and manufacturer’s data sheets for compaction equipment.
- E. All submittals shall be in accordance the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2.

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1.5 SITE INFORMATION

- A. It is hereby understood that the Contractor has carefully examined the site and all conditions affecting work under this Section. No claim for additional costs will be allowed because of lack of full knowledge of existing conditions.
- B. Plans, surveys, measurements and dimensions, under which the work is to be performed are believed to be correct to the best of the Engineer's knowledge, but the Contractor shall have examined them for himself during the bidding period, as no allowance will be made for any errors or inaccuracies that may be found herein.
- C. The Contractor may request to perform additional test borings and other explorations at no cost to the Owner.
- D. It is the responsibility of the Contractor under this Contract to do the necessary excavation, filling, grading and rough grading to bring the existing grades to subgrade and parallel to finished grades as specified herein and as shown on the Drawings for this Work. The Contractor shall visit the site prior to submitting a bid to become familiar with the extent of the work to be done under this Contract. The Contractor shall be responsible for determining the quantities of earth materials that must be imported or hauled off the site necessary to complete the work under this Section. All imported earth materials required to construct the project shall be included in the Contractor's base bid.
- E. The Contractor is allowed to re-use excavated On-Site Common Borrow as fill in accordance with this specification. All On-Site Common Borrow used as backfill shall be meet the specified in Subsection M.01.01 of the State Standards, except that not more than 10% shall pass the #200 sieve and shall be compacted to the required percentage of maximum dry density included in Table 1 below.
 - 1. The Contractor agrees to use onsite material conforming to the specifications at his own risk and is responsible for any additional work required to install this material in accordance with the specifications, at no additional cost to the Owner.
 - 2. If project delays will result from the additional time required to re-work On-Site Common Borrow, placed as fill in accordance with the specifications, the Contractor shall remove material that does not meet the compaction requirements and provide imported fill meeting the specifications. This imported material shall be provided at no additional expense to the Owner.
 - 3. Any project delays resulting from additional time required to work this material are the responsibility of the Contractor.
 - 4. 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 Engineer and shall not proceed further until instructions are given. Exploratory tests required to evaluate the extent of such conditions shall be performed by the Contractor.
 - 5. The Contractor shall satisfactorily excavate and remove all unsuitable material to lines, grades and limits indicated on the drawings or as directed in writing by the Owner, and shall legally dispose of such material off-site.

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- F. The Contractor shall use suitable on-site soils and fill, and soil from off-site sources, as needed. Please note that not all on-site materials will be suitable for reuse, nor will all required material gradations be present on the site. Imported materials are anticipated for this project.
- G. Contractor shall protect and adjust moisture condition of all on-site and imported materials for proper installation, compaction, and use. This includes covering, drying, and adding moisture as required to maintain suitable workability of the soil materials. Please note onsite and imported materials will not necessarily be encountered, or delivered in a suitable condition as environmental factors prevalent at the time of construction will impact soil materials.

1.6 DEFINITIONS

- A. Backfill: Soil material used for fill and excavation.
 - 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
 - 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Base Course: Course placed between the subbase course and asphalt paving.
- C. Bedding Course: Layer placed over the excavated subgrade in a trench before laying pipe.
- D. Prepared Ground Surface: The ground surface after clearing, grubbing, stripping, excavation, and scarification and/or compaction.
- E. Completed Course: A course or layer that is ready for the next layer or next phase of the work.
- F. Drainage Course: crushed stone supporting the slab-on-grade that also minimizes upward capillary flow of pore water.
- G. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated on the Drawings.
 - 1. Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Engineer. Additional excavation and replacement material will be paid for according to Contract provisions for unit price
 - 2. Bulk Excavation: Excavation more than 6 feet in width and more than 10 feet in length.
 - 3. Trench Excavation: Excavation 6 feet in width or less for the installation of utilities.
 - 4. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work directed by Engineer, shall be without additional compensation.
- H. Fill: Soil materials used to raise existing grades.
- I. Imported Material: Material obtained by the Contractor from sources off the site.
- J. Influence Area: The area within planes sloped downward and outward at an angle of 60 degrees from the horizontal from (a) 1 foot outside the outermost edge at the base of foundations or slabs; or (b) 1 foot outside the outermost edge at the surface of roadways or shoulder; or (c) 0.5 foot outside the exterior edge at the spring line of pipes and culverts.

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- K. Optimum Moisture Content: Determined by the ASTM standard specified to determine the maximum dry density for relative compaction.
- L. Relative Compaction: The ratio, in percent, of the as-compacted field dry density to the laboratory maximum dry density as determined by ASTM D1557. Corrections for oversize material may be applied to either the as-compacted field dry density or the maximum dry density, as determined by the Engineer.
- M. Relative Density: As defined by ASTM D4253 or D4254.
- N. Rock: Rock material in beds, ledges, unstratified masses, conglomerate deposits that cannot be removed, in the opinion of the Engineer, without systematic drilling, ram hammering, blasting, or ripping. Rock also includes boulders of rock material that exceed 2 cu. yd. for bulk excavation or 1 cu. yd. diameter for footing, trench, and pit excavation.
1. Trench Rock Excavation: Rock encountered within trench excavation as defined above.
 2. Structure Rock Excavation: Rock encountered beneath proposed structure as defined above.
- O. Subbase Course: Course placed between the subgrade and base course for asphalt pavement, or course placed between the subgrade and a cement concrete sidewalk or curb ramp.
- P. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, drainage fill, or topsoil materials.
- Q. Topsoil: Natural or cultivated top layer of the soil profile or manufactured topsoil; containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 1 inch in diameter; and free of weeds, roots, and toxic and other non-soil materials.
- R. Unsuitable Soils: Organic material, peat, organic silt or combinations thereof; and any existing materials of such gradation that more than 40% of its total weight passes the No. 200 sieve in a standard gradation analysis (ASTM D422), unless otherwise determined by Engineer. All materials of whatever description, which are in the opinion of the Engineer as too loose, saturated, or otherwise inappropriate for use as backfill to provide satisfactory bearing or compaction, shall be considered as unsuitable
- S. Well-Graded: A mixture of particle sizes that has no specific concentration or lack thereof of one or more sizes. Well-graded does not define any numerical value that must be placed on the coefficient of uniformity, coefficient of curvature, or other specific grain size distribution parameters. Well-graded is used to define a material type that, when compacted, produces a strong and relatively incompressible soil mass free from detrimental voids.
- T. Non-hazardous Contaminated Material: Material, water or soil that does not meet the definition of hazardous contaminated materials but contains detectable quantities of volatile organic compounds (VOCs), petroleum, polychlorinated biphenyls (PCBs), or other hazardous material or metals.

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- U. Non Contaminated Material: Material, water, or soil which, following laboratory testing, is determined to contain no detectable concentrations of VOCs, petroleum, PCBs, or other hazardous material or metals.

1.8 IMPORTED MATERIAL ACCEPTANCE

- A. All imported earth materials specified in this section are subject to the following requirements:
 - 1. Materials imported to the site by the Contractor for on-site use shall not contain oil and/or hazardous materials.
 - 2. All tests necessary for the Contractor to locate acceptable sources of imported material shall be made by the Contractor. Certification that the material conforms to the Specification requirements along with copies of the test results from a qualified commercial testing laboratory shall be submitted to the Engineer for approval at least 5 calendar days before the material is required for use. All material samples shall be a minimum of 40 pounds and furnished by the Contractor at the Contractor's sole expense. Samples shall be representative and be clearly marked to show the source of the material and the intended use on the project. Sampling of the material source shall be done by the Contractor in accordance with ASTM D75. Tentative acceptance of the material shall be based on an inspection of the source by the Engineer and/or the certified test results submitted by the Contractor to the Engineer at the Engineer's discretion. No imported materials shall be delivered to the site until the proposed source and the Engineer has tentatively accepted materials tests in writing. Final acceptance will be based on Quality Control and Quality Assurance tests made on samples of material taken from the completed and compacted course.
 - 4. Gradation tests by the Contractor shall be made on samples taken at the place of production prior to shipment. Samples of the finished product for gradation testing shall be taken as specified in Division 1, or more often as directed by the Engineer if variation in gradation is occurring, or if the material appears to depart from the Specifications. Test results shall be forwarded to the Engineer within 48 hours of testing.
 - 5. If tests conducted by the Contractor or the Engineer, indicate that the material does not meet Specification requirements; material placement will be terminated until corrective measures are taken. Material that does not conform to the Specification requirements and is placed in the work shall be removed and replaced at the Contractor's sole expense. Retesting of material that does not meet specification requirements shall be performed at the Contractor's sole expense.

1.9 QUALITY ASSURANCE

- A. Provide in accordance with the requirements as specified in Section 01400, Quality Control.
- B. Employ a qualified surveyor, registered with the State of Rhode Island as a Professional Land Surveyor, as required for all layout and to establish grades for the work being performed.
 - 1. Prior to commencing work, Contractor's surveyor shall perform a benchmark level verification to confirm vertical and horizontal control of the site. Notify Owner and Owner's Representative prior to commencing work if discrepancies are found.

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- C. Geotechnical Testing Agency Qualifications: An independent testing agency qualified according to ASTM E 329 to conduct soil materials and rock-definition testing, as documented according to ASTM D 3740 and ASTM E 548 shall be hired to provide required testing of earthwork materials at the Contractor's Expense.
- D. Pre-excavation Conference: Conduct conference at Project site to comply with requirements in Division 1.
- E. All support of excavations shall be designed, detailed, and stamped by a Professional Engineer registered in the State of Rhode Island. Refer to Section 02305 – Support of Excavation and Dewatering.

1.10 PROJECT CONDITIONS

- A. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Owner and then only after arranging to provide temporary utility services according to requirements indicated.
 - 1. Notify Owner and Engineer not less than two weeks in advance of proposed utility interruptions in writing. Renotify 72 hours in advance of proposed utility interruptions.
 - a. Do not proceed with utility interruptions without Owner's written permission.
 - b. All power shutdowns shall be on weekends between 6:30am and 7:00pm.
 - 2. Contact "Dig Safe" at 1-888-Dig and the Pawtucket DPW to verify locations of existing underground utilities in areas of proposed excavation prior to commencing any excavation effort.
 - 3. If active utilities existing on the site are encountered they shall be carefully protected from damage. When an active utility line is exposed during construction, its location and elevation shall be documented and both the Owner or Engineer and the Utility Owner notified in writing.
 - 4. Active utility lines damaged in the course of construction operations shall be repaired or replaced as determined by the Owner or Engineer and Utility Owner, without additional cost to the Owner.
- B. Demolish and completely remove from site existing underground utilities indicated to be removed on the Drawings. Coordinate with utility companies to shut off services if lines are active.

1.11 USE OF EXPLOSIVES

- A. The use of explosives is not permitted for this Contract work.

1.12 EXCAVATION SAFETY

- B. The Contractor shall be solely responsible for making all excavations in a safe manner. Contractor shall comply with all Local and State OSHA requirements.
- C. Provide appropriate measures to attain a stable base, retain excavation side slopes and prevent earth slides to ensure that persons working in or near the excavation are protected.

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1.13 SHORING, SHEETING, BRACING, AND SLOPING

- A. See Specification Section 02305 Support of Excavation and Dewatering.

1.14 CODES AND ORDINANCES

- A. The Contractor shall familiarize itself with, and comply with, all applicable codes, ordinances, statutes, and bear sole responsibility for the penalties imposed for noncompliance.

1.15 LAYOUTS AND GRADES

- A. All line and grade work not presently established at the site shall be laid out by a survey team under the supervision of a Registered Land Surveyor or Professional Engineer employed by the Contractor in accordance with Drawings and Specifications. The Contractor shall supply all additional layout and grade control as necessary to properly implement and construct the work. The Contractor shall establish permanent benchmarks and replace as directed any which are destroyed or disturbed.
- B. The words “finished grades” as used herein shall mean final grade elevations indicated on the Drawings. Spot elevations shall govern over proposed contours. Where not otherwise indicated, project site areas outside of the building shall be given uniform slopes between points for which finished grades are indicated or between such points and existing established grades.

1.16 TOLERANCES

- A. All material limits shall be constructed within a vertical tolerance of 0.1 foot and a horizontal tolerance of 1 foot except where dimensions or grades are shown or specified as minimum. All grading shall be performed to maintain slopes and drainage as shown. No reverse slopes will be permitted.

1.17 DRAINAGE

- A. The Contractor shall control the grading in areas under construction on the site so that the surface of the ground will properly slope to prevent accumulation of water in excavated areas and adjacent properties.
- B. The Contractor shall excavate interceptor swales and ditches where necessary prior to the start of major earthmoving operations to insure minimal erosion and to keep areas as free from surface water as possible.
- C. Should surface, rain or ground water be encountered during the operations, the Contractor shall furnish and operate pumps or other equipment, and provide all necessary piping to keep all excavations clear of water at all times and shall be responsible for any damage to work or adjacent properties for such water. All piping exposed above ground surface for this use, shall be properly covered to allow foot traffic and vehicles to pass without obstruction.

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- D. Presence of ground water in soil will not constitute a condition for which an increase in the contract price may be made. Under no circumstances place concrete fill, lay piping or install appurtenances in excavation containing free water. Keep utility trenches free of water until pipe joint material has hardened and backfilled to prevent flotation.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General: All soil fill materials shall consist of hard, durable, sand and gravel and shall be free from ice and snow, roots, sod, rubbish, and other deleterious or organic matter.
- B. Common Borrow shall be imported material conforming to Item M.01.01 of the State Standards, except that not more than 10% shall pass the #200 sieve. Onsite granular material, free from stones, roots, organic matter and of suitable gradation for satisfactory compaction, may be reused as backfill upon approval by the Owner or Engineer.
- C. Gravel Borrow shall be imported granular fill material conforming to Item M.01.02.1 of the State Standards except that 100 percent by weight shall be less than 3 inches in size.
- D. Gravel Borrow Subbase shall be imported granular fill material conforming to Item M.01.09, Table 1, Column 1 of the State Standards except that 100 percent by weight shall be less than 3 inches in size. Subbase material shall be free of debris, broken pavement, waste, frozen materials, vegetation, and other deleterious matter
- E. ¾" Crushed Stone Bedding Material shall be imported material conforming to Item M.01.04 of the State Standards.
- F. Sand Bedding Material shall be imported material conforming to Item M.10.03.1 designation FS-1 of the State Standards.
- G. Stabilized Construction Entrance Stone shall be imported material conforming to Item M.01.09 Type II of the State Standards.
- H. Trench Stabilization Material shall conform to Item M10.03.1 designation FS-3 of the State Standard.
- I. Water for compaction shall be furnished by the Contractor. Water for compaction from sources other than potable sources shall be as approved by the Owner or Engineer.
- J. Drainage Stone or Crushed Stone shall be imported material shall consist of 100 percent crushed particles and shall meet the gradation requirements of Item M.02.03 1½" Aggregate Size of the State Standards as follows:

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<u>Sieve Size</u>	<u>% Passing</u>
2"	100
1 ½"	85 – 100
¾"	35 – 70
3/8"	10 – 30
No.4	0-5

2.2 GEOTEXTILES

A. GEOTEXTILE FABRIC

1. Geotextile No. 1: Geotextile Fabric for erosion control/slope protection. Geotextile No. 1 is a nonwoven geotextile composed of polypropylene fibers, which are formed into a stable network such that fibers retain their relative position. The product is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids.

Mechanical Properties	Test Method	Unit	Minimum Average Roll Value
Grab Tensile Strength	ASTM D4632-91	lbs.	120
Grab Tensile Elongation	ASTM D4632-91	%	50
Trapezoid Tear Strength	ASTM D4533-91	lbs.	50
Mullen Burst Strength	ASTM D3786-87	psi	225
Puncture Strength	ASTM D4833-00	lbs.	65
Apparent Opening Size (AOS)	ASTM D4751-99A	U.S. Sieve	70
Permittivity	ASTM D4491-99A	sec ⁻¹	1.8
Permeability	ASTM D4491-99A	sec	0.21
Flow Rate	ASTM D4491-99A	gal/min/ft	135
UV Resistance (at 500 hours)	ASTM D4355-02	% strength retained	70

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Physical Properties	Test Method	Unit	Typical Value
Weight	ASTM D5261-92	oz/yd	4.8
Thickness	ASTM D5199-01	mils	55
Roll Dimensions (width x length)	--	ft	12.5 x 360 / 15 x 360
Roll Area	--	yd	500 / 600
Estimated Roll Weight	--	lb.	164 / 197

2. Geotextile No. 2: Geotextile No. 2 is a nonwoven geotextile composed of polypropylene fibers, which are formed into a stable network such that fibers retain their relative position. The product is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids.

Mechanical Properties	Test Method	Unit	Minimum Average Roll Value
Grab Tensile Strength	ASTM D4632	lbs.	160
Grab Tensile Elongation	ASTM D4632	%	50
Trapezoid Tear Strength	ASTM D4533	lbs.	60
Mullen Burst Strength	ASTM D3786	psi	305
Puncture Strength	ASTM D4833	lbs.	95
Apparent Opening Size (AOS)	ASTM D4751	U.S. Sieve	70
Permittivity	ASTM D4491	sec ⁻¹	1.4
Permeability	ASTM D4491	sec	0.22
Flow Rate	ASTM D4491	gal/min/ft	110
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	70

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Physical Properties	Test Method	Unit	Typical Value
Weight	ASTM D5261	oz/yd	6.4
Thickness	ASTM D5199	mils	75
Roll Dimensions (width x length)	--	ft	15 x 300
Roll Area	--	yd	500
Estimated Roll Weight	--	lb.	217

PART 3 - EXECUTION

3.1 PREPARATION

- A. Furnish, install, and maintain shoring, sheeting, bracing, and sloping necessary to support the sides of earth and rock excavations, and to keep and prevent any movement which may damage adjacent structures, pavements, and utilities, damage or delay the work, or endanger life and health. Furnish, install, and maintain shoring, sheeting, bracing, and sloping as required by OSHA and other applicable government regulations and agencies. See Specification Section 02305-Support of Excavation and Dewatering.
- B. All temporary shoring and bracing shall be designed, detailed, and stamped by a Professional Engineer registered in the State of Rhode Island.
- C. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent building area and walkways.
- D. The use of onsite, excavated material may require stockpiling to allow the material to dry prior to placement. Provide erosion-control measures as specified in the drawings and as required by the Owner's Representative to prevent erosion of piles during wet weather periods.

3.2 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
 - 2. Install a dewatering system, specified in Section 02305 – Support of Excavation and Dewatering, to keep subgrades dry and convey ground water away from excavations. Maintain until dewatering is no longer required at no additional expense to the Owner.

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3.3 WORK IN FREEZING WEATHER:

- A. Protect excavation bottoms against freezing when atmospheric temperature is less than 35 degrees Fahrenheit.
- B. In freezing weather, a layer of fill shall not be left in an uncompacted state at the close of a day's operation. Prior to terminating operations for the day, the final layer of fill, after compaction, shall be rolled with a smooth-wheeled roller to eliminate ridges of soil left by tractors, trucks and compaction equipment.
- C. The Contractor shall not place a layer of compacted fill on snow, ice, or soil that was permitted to freeze prior to compaction. Removal of these unsatisfactory materials will be required as directed by the Owner's Representative.
- D. Do not excavate to full indicated depth when freezing temperatures may be expected, unless work can be completed to subgrade or piping can be installed and backfilled the same day. Protect the excavation from frost if placing of concrete or piping is delayed.
- E. The Contractor shall keep the operations under this Contract clear and free of accumulation of snow within the limits of Contract Lines as required to carry out the work.

3.4 ROCK EXCAVATION:

- A. General
 - 1. Rock excavation includes the removal of rock to the lines and grades shown on the plans and as specified within this Section and the disposal of the Rock off site by legal methods.
 - 2. The Contractor shall obtain all necessary permit and licenses and pay all fees at no additional cost to the Owner.
 - 3. Rock capable of removal through standard excavation procedures shall be removed from the excavation, measured by the Contractor, and verified by the Owner's Representative.
 - 4. The dimensions and quantity of the uncovered rock in place and the rock removed from the trench shall be measured by a Licensed Land Surveyor registered in the State of Rhode Island at the Contractor's expense. All survey information shall be supplied to the Owner's Representative for verification of the quantity. Survey information shall include the existing rock surface topography, the removed rock surface topography and the rock removal limits as specified herein.
 - 5. If a change in the work occurs, which includes the excavation of additional rock outside the original contract limits, the Contractor shall uncover all rock to be removed. Upon uncovering rock in excavations that cannot be removed by standard excavation measures, the Contractor shall expose all faces of rock in the area that requires excavation and notify the Owner. The dimensions and quantity of the rock in place and the rock removed from the trench shall be measured by a Licensed Land Surveyor registered in the State of Rhode Island at the Contractor's expense. All survey information shall be supplied to the Owner's Representative for verification of the quantity.
 - 6. Rock shall be removed by mechanical means and methods.

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B. Rock Removal Limits

1. The Contractor shall remove rock to elevations, which will allow the installation of all foundations, footings, utilities, structures, trees and plantings, shown on the drawings.
2. The Contractor shall remove rock to a minimum of 30 inches below finished grade in paved areas and a minimum of 24 inches below finished grade in landscaped areas.
3. Around proposed utilities, the Contractor shall remove rock to the lines and subgrade elevations indicated on drawings and as dictated within this specification. The Contractor shall remove sufficient rock to permit the installation of permanent construction without exceeding 12 inches beneath pipe in trench or structure, and the greater of 24 inches wider than pipe or 36 inches wide.

C. Rock Excavation for the Removal of Utilities and Structures

1. Remove rock directly above and to the sides of piped utilities and structures proposed for removal without exceeding the following dimensions:
 - a. 12 inches outside of concrete structures, walls, and footings.
 - b. 12 inches from either edge of piped utility and 12 inches below piped utility
 - c. 6 inches outside of edge of concrete cast against grade.
 - d. 6 inches beneath bottom of concrete pads or slabs on grade.
2. Upon uncovering rock within a trench that cannot be removed by standard excavation measures, the Contractor shall expose all faces of rock within the trench and notify the Owner. The dimensions of the rock in place shall be measured by survey instrument by a RI Licensed Land Surveyor at the Contractor's expense and verified by the Owner's Representative.
3. Rock capable of removal through standard excavation procedures shall be removed from the trench, measured by the Contractor, and verified by the Owner's Representative.

3.5 EXCAVATION, GENERAL

- A.** Excavate to subgrade elevations. Material to be excavated will be classified as earth or rock. Do not excavate rock until it has been classified and quantified by the Contractor's land surveyor, and verified by the Owner's Representative
1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; together with soil, boulders, and other materials not classified as rock or unauthorized excavation.
- B.** All topsoil, pavement and unsuitable or excess materials shall be stripped from areas of new construction or regrading. Materials suitable for reuse shall be stored in locations and approved by the City of Pawtucket and will not interfere with construction operations. Existing topsoil shall be stripped and stored on-site before any underlying excavating is begun. Existing topsoil is the property of the City of Pawtucket and shall not be removed from the site. Contractor shall haul material to a location on site designated by the Owner.
- C.** Earth excavation is unclassified and shall include the excavation, removal and satisfactory disposal of all materials of whatever nature encountered from within the limits indicated or specified (other than rock ledge) or as directed in writing. It shall include, but not be limited to earth materials such as peat, organic or inorganic silts, clay, sand and gravel, cobbles and boulders less than 1 cubic yard in volume, soft or disintegrated rock which, in the opinion of the Owner or Engineer, can be removed without drilling, and all obstructions not specifically included in another section.

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- D. All excavations shall be backfilled as specified and as shown in the Drawings. It is Owner's intent to backfill trenches with Common Borrow as described above.
- E. All soil fills, shall be placed in 12-inch compacted lifts and tested to ensure 95% relative compaction is achieved. Each layer shall be systematically compacted by approved compaction equipment to the density specified herein. Compaction equipment in open areas shall consist of a vibratory drum roller with a minimum static weight of 10,000 lbs. Compaction equipment in confined areas (in trenches and adjacent to walls) shall be accomplished by hand-operated vibratory compaction.
- F. The Contractor shall backfill all supported excavations in such a way as to ensure all voids that develop both behind the support of excavation and as a result of the removal of the excavation are entirely filled with compacted soil fills
- G. All excess and unsuitable materials shall be legally disposed of off-site by the Contractor.
- H. Excavation for pavements shall be made to line and grades as shown on the Drawings.

3.6 EXCAVATION FOR STRUCTURES:

- A. Shall conform to dimensions and elevations indicated with tolerance as stated in the Quality Control paragraph in Part 1.12 of this Section. Excavations shall be made to allow sufficient room for construction and removal of formwork and inspection.
- B. Do not disturb bottom of foundation excavations. Excavate by hand to final grade just before placement of concrete. Trim bottoms to required grades and lines to leave a firm base.

3.7 TRENCH EXCAVATION:

- A. Excavate for the installation of utilities and manholes to the depths and widths shown. All obstructions, such as tree roots, stumps, large stones, boulders, rocks and other material of any type shall be removed.
- B. Minimum width of trenches or the minimum clear width of supported trenches in which pipe is to be laid shall be 24 inches greater than the outside diameter of the pipe. Sheeting requirements shall be independent of trench width. The maximum clear width at trench shall be as shown on the drawings.
- C. Utility trenches shall be excavated a minimum of 12-inches below the bottom of the utility line to accommodate bedding material. Allow for working space and slopes as shown or required. Do not carry excavations deeper than the elevations shown without approval from the Owner or Engineer. Excavation carried below the grade lines shown or established by the Owner or Engineer shall be filled with the same material as specified for the overlying backfill, and compacted as required for such overlying backfill.
- D. Complete the final portion of the excavation with a smooth grading (non-toothed) bucket so as to not disturb the underlying soils to remain.

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- E. After completion of excavation, and prior to bedding material placement, compaction of the excavation surface will be required at the discretion of the engineer. Notify the Owner or Engineer prior to placing bedding material if subgrade soils are soft, loose or disturbed. Soft or loose zones shall be excavated to a depth accepted by the Owner or Engineer, then filled with Trench Stabilization Material. The cost of such excavation shall be paid for under the appropriate unit price bid item

3.8 SUBGRADE INSPECTION

- A. Notify Owner's Representative when excavations have reached required subgrade.
- B. If Engineer determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
- C. The Contractor shall stabilize native soil subgrades that become disturbed (for example due to groundwater or over-excavation), place a 12- to 18-inch layer of Gravel Borrow compacted to 95% of the relative density or 6-inches of Crushed Stone.
- D. Proof-roll subgrade below the pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
 - 1. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Continue this process until the area has been proof-rolled 4-6 times. Limit vehicle speed to 3 mph.
 - 2. Proof-roll with a vibratory roller with a static weight of no less than 10,000 lbs. and a dynamic weight of 20,000 lbs.
 - 3. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Engineer, and replace with compacted backfill or fill as directed.
- E. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Engineer, without additional compensation.

3.9 UNAUTHORIZED EXCAVATION

- A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by Engineer.
- B. Concrete required to fill unauthorized excavation shall be furnished and installed at the expense of the Contractor.

3.10 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Stockpile soil materials away from edge of excavations in locations approved by the City of Pawtucket. Do not store within drip line of remaining trees.

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3.11 BACKFILL GENERAL

- A. It is the owner's intent to backfill with common borrow as specified above. The Contractor shall meet all applicable compaction and backfilling requirements (e.g., maximum lift thicknesses, compaction rates, etc.) stipulated in this section.
- B. The contractor shall notify the Engineer a minimum of 2 days prior to backfilling utility trench to schedule inspection.
- C. Place and compact backfill in excavations promptly, but not before completing the following:
 - 1. Construction below finish grade including, where applicable, subdrainage, damp proofing, waterproofing, and perimeter insulation.
 - 2. Surveying locations of underground utilities for Record Documents.
 - 3. Testing and inspecting underground utilities.
 - 4. Removing concrete formwork.
 - 5. Removing trash and debris and/or any other unsuitable material
 - 6. Removing temporary shoring and bracing, and sheeting.
 - 7. Receiving approval from the Engineer, the respective Utility Company, and the City of Pawtucket following inspection.
- D. Do not place froze backfill. Place backfill on subgrades free of mud, frost, snow, ice or standing water.
- E. Do not operate earth-moving or other heavy equipment within a distance that will cause damage to new or existing structures. Compact backfill adjacent to and on top of existing and new structures, utilities, and concrete walls with hand-operated vibratory compactors or other acceptable equipment. Compaction shall be performed in a manner, which will not damage new or existing structures and utilities.
- F. The Contractor is allowed to re-use excavated On-Site Common Borrow as fill in accordance with this specification. All On-Site Common Borrow used as backfill shall be compacted to the required percentage of maximum dry density included in the Table below.
 - 1. The Contractor agrees to use onsite material conforming to the specifications at his own risk and is responsible for any additional work required to install this material in accordance with the specifications.
 - 2. If project delays will result from the additional time required to re-work On-Site Common Borrow, placed as fill in accordance with the specifications, the Contractor shall remove material that does not meet the compaction requirements and provide imported fill meeting the specifications. This imported material shall be provided at no additional expense to the Owner.
 - 3. Any project delays resulting from additional time required to work this material are the responsibility of the Contractor.

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3.12 PIPE BEDDING AND UTILITY TRENCH BACKFILL

A. TRENCH BEDDING

1. All pipelines shall be laid in crushed stone bedding material in accordance with the Contract Drawings.

B. TRENCH BACKFILLING

1. Place and compact initial backfill conforming to the specified material requirements to the height specified on the Drawings over the utility pipe or conduit.
2. Backfill materials placed from the top of pipe bedding up to the bottom of the pavement profile or bottom of topsoil layer shall be Common Borrow as specified above.
3. Common Borrow shall be placed in 12-inch loose lifts with each lift compacted to no less than 95% relative compaction.
4. Fill adjacent to pipelines and structures shall be placed evenly on both sides to prevent displacements.
5. Backfill and compact over pipelines such that no damage occurs to the piping. The Owner or Engineer may request that pipes be excavated and exposed to observe if the pipe has been damaged. All damaged pipe shall be removed and replaced at no additional cost to the Owner.

C. Backfill voids with satisfactory soil while installing and removing shoring and bracing.

D. BACKFILL FOR FINAL

1. Place and compact final backfill of satisfactory soil to final subgrade elevation.
2. Backfill or filling required below subgrade elevation shall be with Common Borrow placed in layers having a minimum loose lift thickness of 12-inches.
3. Gravel subbase shall be placed in layers having a maximum loose lift thickness of 12-inches except in confined areas or within 3 feet of new or existing structures where maximum loose lift thickness shall be 8-inches or less as determined by the Owner or Engineer.

3.13 SOIL MOISTURE CONTROL

A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.

1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
2. Remove and replace or scarify and air dry otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.
3. The Contractor shall furnish water for compaction. Water for compaction from sources other than potable sources shall be as approved by the Engineer.
4. Maintain moisture content throughout the lift. Insofar as practicable, add water to the material at the site of excavation.

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3.14 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Compaction shall be completed with a vibratory roller having a static weight of 10,000 lbs. and a dynamic weight of 20,000 lbs.
- C. The Contractor shall use caution when compacting near existing utilities including electric and communications duct banks. Any damage to existing utilities or structures resulting from compaction operations shall be repaired at the expense of the Contractor.
- D. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.
- E. The Contractor is allowed to re-use excavated On-Site Common Borrow as fill in accordance with this specification. All On-Site Common Borrow used as backfill shall be compacted to the required percentage of maximum dry density included in Table 2.
- F. Compact soil materials to not less than the following percentages of maximum dry density

TABLE 1: MINIMUM COMPACTION REQUIREMENTS	
Location	Percent of Maximum Dry Density ¹
Backfill within pavement base and sub base layers	95
Backfill below pavement sub base layers	95
Around and above utilities in paved areas	95
Backfill within landscaped areas	95

¹ Maximum dry density as determined by the Modified Proctor test (ASTM D 1557)

3.15 SUBBASE AND BASE COURSES

- A. Place subbase and base course on subgrades free of mud, frost, snow, or ice.
- B. Place subbase and base course on subgrade in 6-inch lifts and compact as specified.

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3.16 FIELD QUALITY CONTROL

- A. Testing Agency: The Contractor shall engage a qualified independent geotechnical engineering testing agency to perform field quality-control testing.
- B. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earthwork only after test results for previously completed work comply with requirements.
- C. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2922, and ASTM D 2937, as applicable. Tests will be performed at the following locations and frequencies:
 - 1. Trench Backfill: At each compacted initial and final backfill layer, at least 1 test for each 150 feet or less of trench length, but no fewer than 3 tests.
 - 2. Pavement Subbase: At each compacted initial and final backfill layer, at least 1 test for each 500 square feet or less of area, but no fewer than 2 tests.
- D. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil to depth required; recompact and retest until specified compaction is obtained.
- E. Contractor shall provide the Engineer and Owner with routine reports summarizing the locations and results of compaction testing performed during that timeframe. These reports shall be provided with each application for payment, as applicable.

3.17 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 - 1. Scarify or remove and replace soil material to depth as directed by Engineer; reshape and recompact.
- C. Where settling occurs remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.18 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Topsoil is the property of the City of Pawtucket and shall not be removed from the site. Contractor shall haul material to a location on site designated by the Owner.
- B. Existing soil or water at the work sites that the Contractor encounters that appears oily, has a chemical odor, or appears to be contaminated, shall immediately be brought to the attention of the Owner or Engineer

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- C. Disposal: Transport surplus satisfactory soil to designated storage areas on Owner's property. Stockpile or spread soil as directed by Engineer.
 - 1. Remove waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

3.19 GEOTEXTILES

- A. Install Geotextiles in accordance with Manufacturer's recommendations.

END OF SECTION

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SECTION 022100

SITE PREPARATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS: Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 REFERENCES

- A. All work specified in this Section shall conform to “Standard Specifications for Road and Bridge Construction” of the Rhode Island Department of Transportation, latest revision, herein referred to as “State Standards” or “Standard Specifications” excluding the provisions of Part 100- General Requirements and Covenants and any reference to measurement and payment.

1.3 SUMMARY

- A. The work of this Section includes the following:
1. Provisions for protection of all existing telecommunications ductbanks, electrical duct banks and other existing utilities from damage particularly at heavy construction vehicle crossings.
 2. Removal, disposal, capping or plugging of drainage and utility piping at the locations specified on the drawings.
 3. Removal and disposal of flexible pavement, curbing, and concrete walks at the locations specified on the drawings.
 4. Removal and disposal of catch basins and manholes.
- B. Related Sections include the following:
1. Section 02200, Earthwork

1.4 DEFINITIONS

- A. Cleaning as described in Subsection 212.01.2a of the State Standards.
- B. Maintenance as described in Subsection 212.01.2b of the State Standards.
- C. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of subsoil and weeds, roots, toxic materials, or other nonsoil materials.
- D. Tree Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction, and defined by the drip line of individual trees or the perimeter drip line of groups of trees, unless otherwise indicated.

1.5 MATERIAL OWNERSHIP

- A. Except for stripped topsoil or other materials indicated to remain on the Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

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- B. The Owner reserves the right to claim ownership over any materials removed from the site, including earthwork. The materials claimed by the Owner shall be stockpiled on the site as directed.
- C. Stripped Topsoil is the property of the Owner and shall not be removed from the site. Contractor shall haul topsoil to a location designated by the Owner.

1.6 SUBMITTALS

- A. Shop Drawings
 - 1. Submit drawings or details indicating proposed provisions for protection of existing existing utilities as the work requires. These utilities must be protected from damage particularly by heavy construction equipment driving over the top of them.
 - 2. All shop drawings shall be in accordance with Section 01300, Submittals.

1.7 PROJECT CONDITIONS

- A. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Owner and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Owner and Engineer not less than two weeks in advance of proposed utility interruptions in writing. Renotify in writing 72 hours in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Owner's written permission.
 - a. All power shut downs shall be on week-ends between 6:30 a.m. and 7:00 p.m.
 - 3. Underground utilities were compiled from available record plans and aboveground locations and are approximate. The Contractor shall contact "Dig-Safe" at 1-888-DIGSAFE and the City of Pawtucket DPW to mark existing utilities 72 hours prior to commencing work on any part of the site.
- B. Demolish and completely remove from site existing underground utilities indicated to be removed.
- C. Contractor shall not operate existing water gate valves and hydrants. All operation of the water distribution system must be completed by Pawtucket Water Supply Board personnel.
- D. All Abandoned underground utilities shall be designated on as-built drawings by the contractor of record and provided to the Owner and Engineer in AutoCAD electrical format prior to completion of the project. All as-built drawings, (underground and above ground) shall be dimensioned from permanent benchmarks such as existing buildings and include depths at various points throughout the extent of the work, and invert elevations at all structures.
- E. Do not commence site operations until temporary erosion and sedimentation control measures are in place.

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PART 2 - PRODUCTS

2.1 GENERAL

- A. The Contractor shall provide all materials and equipment in suitable and adequate quantity as required to accomplish the work shown and specified.

PART 3 - EXECUTION

3.1 REMOVE AND DISPOSE DRAINAGE AND OTHER GRAVITY UTILITY PIPING

- A. All pipe or conduit designated to be removed shall be so-removed and legally disposed of off-site. Drain pipes or other pipes, ducts, etc., cut and deemed advisable to remain in the earth shall be plugged with cement or brick. The Contractor shall cooperate with the City and utility companies so that the demolition work may be performed in accordance with their regulations and with the approval of the Engineer.
- B. Removal of all asbestos cement pipe, if found, shall be in accordance with Subsection 201.03.8 of the Standard Specifications.

3.2 REMOVE AND DISPOSE CONCRETE UTILITY STRUCTURES

- A. All concrete utility structures designated to be removed shall be so-removed and legally disposed of off-site. The Contractor shall cooperate with the Town and utility companies so that the demolition work may be performed in accordance with their regulations and with the approval of the Engineer.

3.3 REMOVE AND DISPOSE FLEXIBLE PAVEMENT, CURBING, CONCRETE RAMPS AND CONCRETE WALKS

- A. In accordance with Subsections 201.03.7, and 201.03.10 of the Standard Specifications.

3.4 DISPOSAL

- A. Disposal: Remove surplus soil material, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property. Any potentially contaminated soil material encountered, as specified by the State of Rhode Island Environmental Management rules and regulations, shall be brought to the Rhode Island Resource Recovery Corporation or another appropriately licensed waste facility for legal disposal.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities.

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3.5 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Locate and clearly flag trees and vegetation to remain or to be relocated.
- C. Protect existing site improvements to remain from damage during construction.
- D. Restore damaged improvements to their original condition, as acceptable to Owner.

END OF SECTION

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SECTION 022510

BITUMINOUS CONCRETE PAVEMENT

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS: Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- 1.2 REFERENCES
- A. All work specified in this Section shall conform to “Standard Specifications for Road and Bridge Construction” of the Rhode Island Department of Transportation, latest revision, herein referred to as “State Standards” excluding the provisions of Part 100- General Requirements and Covenants and any reference to measurement and payment.
- 1.3 SUMMARY
- A. This Section includes the following:
1. Bituminous concrete paving.
 2. Trench patching
 3. Asphalt surface treatments.
 4. Pavement-marking paint.
- B. Related Sections include the following:
1. Section 02200, Earthwork
 2. Section 022580, Pavement Markings
- 1.4 DEFINITIONS
- A. DOT: Rhode Island Department of Transportation
- 1.5 DESIGN REQUIREMENTS
- A. Use all means necessary to protect bituminous concrete pavement materials before, ongoing, and after installation, and to protect the installed work and materials of all other trades.
- B. In the event of damage, immediately make all repairs and replacements necessary as directed by the Engineer at no additional expense to the Owner.
- 1.6 SUBMITTALS
- A. Provide in accordance with the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2.
- B. Product Data: For each type of product indicated include technical data, gradation, and composition of materials proposed.

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- C. Job-Mix Designs: Certification, by authorities having jurisdiction, of approval of each job mix proposed for the Work.
- D. Qualification Data: For manufacturer.
- E. Material Test Reports: For each paving material.
- F. Conformance Certificates: For each paving material, signed by manufacturers.

1.7 QUALITY ASSURANCE

- A. Provide in accordance with Section 01400, Quality Control.
- B. Manufacturer shall be a paving-mix manufacturer registered with and approved by the Rhode Island Department of Transportation.
- C. Testing Agency Qualifications: Qualified according to ASTM D 3666 for testing indicated, as documented according to ASTM E 548.
- D. Regulatory Requirements: Comply with the State Standards.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver pavement-marking materials to Project site in original packages with seals unbroken and bearing manufacturer's labels containing brand name and type of material, date of manufacture, and directions for storage.
- B. Store pavement-marking materials in a clean, dry, protected location within temperature range required by manufacturer. Protect stored materials from direct sunlight.

1.9 PROJECT CONDITIONS

- A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp or if the following conditions are not met:
 - 1. Prime and Tack Coats: Minimum surface temperature of 60° F.
 - 2. Hot Mix Asphalt Base Course: Minimum surface temperature of 40° F and rising at time of placement.
 - 3. Hot Mix Asphalt Surface Course: Minimum surface temperature of 60° F at time of placement.
- B. Pavement-Marking Paint: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 40 deg F for oil-based materials, 50° F for water-based materials, and not exceeding 95° F.

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PART 2 – PRODUCTS

2.1 HOT MIX ASPHALT SURFACE COURSE

- A. Modified Class 9.5; conform to Subsection 401.02 and Item M.03 of the State Standards.

2.2 HOT MIX ASPHALT BASE COURSE

- A. Conform to Subsection 401.02 and Item M.03 of the State Standards.

2.3 TACK COAT

- A. Conform to Asphalt Emulsion Tack Coat as specified in Section 403 of the State Standards

2.4 GRAVEL SUB-BASE COURSE

- A. Conform to Gravel Borrow Sub-base as specified in Section 02200, Earthwork.

2.5 SUBGRADE

- A. Reuse on-site material, or Common Borrow, as specified in Section 02200, Earthwork.

2.6 CURBING:

- A. Precast concrete curbing shall conform to Subsection 905.01.2 and 905.02.2, and M.09.03 of the State Standards

2.7 PAVEMENT MARKINGS:

- A. Shall be in conformance with Section 022580 PAVEMENT MARKINGS.

2.8 COARSE AGGREGATE

- A. ASTM D 692, sound; angular crushed stone, crushed gravel, or properly cured, crushed blast-furnace slag.

2.9 FINE AGGREGATE

- A. ASTM D 1073, sharp-edged natural sand or sand prepared from stone, gravel, properly cured blast-furnace slag, or combinations thereof.
 - 1. For hot-mix asphalt, limit natural sand to a maximum of 20 percent by weight of the total aggregate mass.

PART 3 - EXECUTION

3.1 CONTRACTOR REQUIREMENTS

- A. The Contractor shall perform and complete the construction work within the limits indicated in a continuous manner so that the pavement placement work may proceed without delay.
- B. The Contractor shall, at all times, prior to acceptance of the work by the Engineer, 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 Engineer and the controlling municipal and State authorities. All maintenance and repairs of the completed work shall be provided by the Contractor at no additional cost to the Owner.
- C. Equipment used in the work will be subject to approval by the Engineer 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.
- D. It shall be the responsibility of the Contractor to obtain from the controlling 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, and at no additional expense to the Owner.
- E. Existing pavements outside of the indicated work limits which are damaged as a result of the Contractor's operations, including base courses, bituminous tack coats and surface courses, shall be replaced by the Contractor in accordance with the requirements specified herein for the respective type of pavement, in a satisfactory manner and at no additional cost to the Owner.
- F. In case of settlement or other defects in new or replaced pavements, the Contractor shall cut out, replace, restore or repair the damaged pavements at no additional expense to the Owner. This requirement shall remain in effect for 2 years after the acceptance of the work by the Engineer. The pavement area to be replaced, repaired or restored, shall extend from edge of pavement to edge of pavement, a minimum of 20 feet on either side of the defect; final pavement course shall be feathered to provide a smooth finish detail.
- G. The Contractor shall furnish a bond for the 2-year duration to the Owner insuring that the corrective repairs will be performed if necessary.
- H. This contract shall not be considered complete until the replacement, restoration and repair of pavements has been provided in a manner satisfactory to the Engineer, and in accordance with the requirements specified herein.

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3.2 SUBGRADE PREPARATION

- A. Prepare subgrade by shaping and compacting to proper grade. Remove all soft and yielding material from the subgrade and replace with suitable material. Compact thoroughly using approved types of rollers or tampers. Insure that all areas are stable and dry.
- B. Saw cut edges of existing pavement along even lines to obtain undisturbed, clean and sound vertical edges of original pavement.
- C. Do not store or stockpile materials on the subgrade.

3.3 GRAVEL SUB-BASE COURSE PLACEMENT

- A. Place materials in the proper lift depths and perform compaction as specified in Section 02200, Earthwork. Make proper allowance for bituminous courses.
- B. All compactions shall be performed with approved equipment well suited to location and material being compacted. Use heavy vibratory rollers where heavy equipment is authorized.
- C. Do not operate heavy equipment closer to a foundation 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.

3.4 HOT MIX ASPHALT BASE COURSE

- A. Provide a Hot Mix Asphalt Base Course on the Road Subbase in compacted thickness as shown on the drawings. The Hot Mix Asphalt Base Course shall be provided in accordance with the applicable requirements of the State Standards, Section 401, Subsection 401.02 and Item M.03 for materials; and Item 401.03 for construction methods.

3.5 BITUMINOUS CONCRETE SURFACE COURSE

- A. Place Modified Class 9.5 Hot Mix Asphalt Surface Course in compacted thickness as shown on drawings. The finished pavement surface shall conform to the proposed grades of the roadway or as directed and shall be flush with all existing pavements unless otherwise indicated.
- B. The Hot Mix Asphalt Surface Course shall be provided in accordance with the applicable requirements of the State Standards, Section 401, Subsection 401.02, and Item M.03 for materials, and Subsection 401.03 for construction methods.
- C. A tack coat conforming to the Rhode Island State Standards shall be applied to the base course prior to the placement of the surface course.

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3.6 COMPACTION

- A. The Contractor shall conform to the State Standards for pavement operations, including compaction (401.03.10).
- B. Immediately after the bituminous mixture has been spread, struck off, and surface irregularities adjusted, it shall be thoroughly and uniformly compacted by rolling. The surface shall be rolled when the mixture is in the proper condition and when rolling does not cause undue displacement, cracking and shoving.
- C. The number, weight and type of rollers furnished shall be sufficient to obtain the required compaction while the mixture is in a workable condition. Rolling shall be continued until all roller marks are eliminated and the minimum densities have been obtained based upon 95 percent of laboratory Marshall Densities made in the proportions of the job-mix formula, AASHTO T-245.
- D. Steel-Tired, Static Weight Rollers: The maximum roller speeds for steel-tired static-weight rollers for various operations shall not exceed three miles per hour. The wheels of steel-wheel rollers shall be kept moist and clean to prevent adhesion of the fresh material, but an excess of water will not be permitted.
- E. Vibratory Rollers: The maximum roller speed for vibratory rollers shall be that which provides impact spacing less than the compacted lift thickness. When vibratory rollers are used in the static mode, roller speed shall not exceed three miles per hour.
- F. When an approved vibratory roller is used for breakdown rolling in a vibratory mode, intermediate rolling will not be required. When the vibratory roller is used for finish rolling it shall be used in the static mode. Rolling shall progress continuously until the specified density of the corresponding daily plant Marshall Density, AASHTO T-245 has been attained. Finish rolling shall continue until all roller marks are eliminated.
- G. Unless otherwise directed, rolling shall start longitudinally at the sides and gradually progress toward the center of the pavement except on super-elevated curves where the rolling shall begin on the low side and progress to the high side, overlapping on successive trips by at least one-half the width of tandem rollers and uniformly lapping each preceding track.
- H. The motion of the rollers shall be slow enough at all times to avoid displacement of the hot mixture. Any displacement resulting from reversing the direction of the rollers or from any other cause shall be satisfactorily corrected.
- I. When the base course, binder course, or wearing course fails to comply with the density requirements herein specified additional compaction might be applied when permitted and as directed, to attain the required density. If satisfactory density cannot be attained the Contractor shall be required to remove and replace, at his own expense, any affected area that is proven to be structurally inadequate and/or incapable of maintaining material integrity.

Any mixture that becomes loose and broken, mixed with dirt, or is in any way defective, shall be removed and replaced with fresh hot mixture, which shall be compacted to conform to the sur-

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rounding area. Any area showing an excess or deficiency of bituminous material shall be removed and replaced.

- J. In the event of dispute as to the creditability of the results, density shall be determined from cores taken from the pavement.

3.8 TACK COAT

- A. Tack coat shall be installed in accordance with Section 403 of the State Standards.

3.9 PAVEMENT MARKINGS

- A. Pavement marking shall be installed in accordance with Section T.20 and conform to the applicable requirements of Section M.17 of the State Standards.

3.10 FIELD QUALITY CONTROL

- A. Thickness: Test in-place asphalt concrete courses for compliance with requirements for thickness. Repair or remove and replace unacceptable paving as directed by Engineer. In-place compacted thickness will not be acceptable if exceeding following allowable variation from required thickness.
- B. Compaction:
 - 1. The Bituminous mixture shall be compacted to at least 95% of the density achieved on the laboratory testing of the design mix for the project.
 - 2. Density will be checked by the Nuclear Density gage Method, ASTM 2950.
 - 3. Test will be performed at a frequency of 1 test for each 500 square feet or less of area, but no fewer than 2 tests.
- C. Guarantee: During the one-year guarantee period, the Contractor shall maintain the surfacing and shall promptly fill with similar material in compliance with the above specifications, any depressions and hold that may occur so as to keep the surfacing in a safe and satisfactory condition for traffic.

END OF SECTION

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SECTION 022580

PAVEMENT MARKINGS

PART 1 GENERAL

1.1 GENERAL PROVISIONS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 DESCRIPTION OF WORK

- A. This Section shall include: Labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
 - 1. The work covered under this Section of the Specifications includes furnishing all labor, equipment, appliances and materials, and performing all operations in connection with the furnishing and placing of the pavement marking as indicated on the Drawings and as herein specified.
- B. Related Sections include the following:
 - 1. Section 02200, Earthwork
 - 2. Section 022510, Bituminous Concrete Pavement

1.3 SUBMITTALS

- A. Provide in accordance with the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2

1.4 QUALITY ASSURANCE

- A. Provide in accordance with Section 01400, Quality Control
- B. Installer Qualifications: A qualified pavement marking installer whose work has resulted in successful establishment pavement markings.
 - 1. Installer's Field Supervisions: Require Installer to maintain an experienced full-time supervisor on Project Site when work is in progress.

1.5 REFERENCE STANDARDS

- A. All work specified in this Section shall conform to "Standard Specifications for Road and Bridge Construction" of the Rhode Island Department of Transportation, latest revision, herein referred to as "State Standards" excluding the provisions of Part 100- General Requirements and Covenants and any reference to measurement and payment.
- B. Permanent and Temporary Pavement Markings shall conform to the relevant provisions of the Manual on Uniform Traffic Control Devices (MUTCD).

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PART 2 MATERIALS

- 2.1 Temporary pavement markings during construction shall be waterborne, conforming to the Standard Specifications
- 2.2 Final Pavement Markings in roadway shall be epoxy resin, conforming to the Standard Specifications.
- 2.3 Pavement markings shall be “white” or “yellow” in color, unless otherwise noted on Drawings.

PART 3 EXECUTION

3.1 INSPECTION

- A. All materials and each part or detail of the work shall be subject to inspection by the Engineer. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the contractor as is required to make a complete and detailed inspection, (such assistance may include furnishing labor, tools, and equipment, at no expense to the Engineer).
- B. If the Engineer so requests, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examine prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering or removing and the replacing of the covering or making good of the parts removed, will be at the Contractor’s expense.
- C. Any work done or materials used without authorization by the Engineer may be ordered removed and replaced at the Contractor’s expense. The Contractor shall furnish written information to the Engineer stating the original sources of supply of the materials manufactured away from the actual site of the work. In order to insure a proper time sequence for required inspection and approval this information shall be furnished at least two weeks (or as otherwise directed by the Engineer) in advance of the incorporation in the work of any such materials.
- D. For the purpose of observing work that affects their respective properties, inspectors for the municipalities, public agencies and the utility companies shall be permitted access to the work, but all official orders and directives to the Contractor will be issued by the Engineer.
- E. The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill the terms of the Contract as herein prescribed by the plans and specifications.
- F. Failure to reject any defective work or materials shall not in any way prevent later rejection when such defect is discovered, or obligate the Engineer to make final acceptance.
- G. The Contractor shall give prior notice to the Engineer when work on the various items is to be performed by him or his Subcontractors. If work is suspended on any time, prior notice shall be given to the Engineer before resumption of the work.

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- H. Pavement markings should be installed within 48 hours after the final pavement installation.
- I. Application of pavement markings shall be in accordance with the Standard Specifications.

END OF SECTION

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SECTION 02273

EROSION AND SEDIMENTATION CONTROLS

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS: Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- 1.2 REFERENCES
- A. All work specified in this Section shall conform to “Standard Specifications for Road and Bridge Construction” of the Rhode Island Department of Transportation, latest revision, herein referred to as “State Standards” excluding the provisions of Part 100- General Requirements and Covenants and any reference to measurement and payment.
- 1.3 SUMMARY
- A. The work of this Section includes the following:
1. Provision of erosion controls, specifically compost filter sock and sack insert basin inlet protection, as indicated on the drawings or as directed by the Owners Representative.
 2. Maintenance, cleaning and replacement of erosion and sedimentation controls specifically compost filter sock and sack insert basin inlet protections, as necessary or as directed by the Owner’s Representative.
 3. Removal and Clean-up
- B. Related Sections include the following:
1. Section 02200, Earthwork.
- 1.4 DEFINITIONS
- A. Cleaning as described in Subsection 212.01.2a of the State Standards.
- B. Maintenance as described in Subsection 212.01.2b of the State Standards.
- 1.5 SUBMITTALS
- A. Shop Drawings:
1. Product information depicting that the products furnished meet the project specifications.
- 1.6 PROJECT CONDITIONS
- A. Do not commence operations which disturb the ground surface until temporary erosion and sedimentation control measures are in place.
- B. In order to prevent erosion and sedimentation from construction activities related to the performance of this project, the Contractor and his subcontractors shall comply with all permits issued for this project, all applicable Federal, State, and local laws and regulations concerning erosion and sediment control, as well as the specific requirements stated in this Section and elsewhere in the Specifications.

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PART 2 - PRODUCTS

2.1 EROSION AND SEDIMENTATION CONTROL MEASURES

- A. Compost filter socks as described in Subsection 206.02.4 of the State Standards.
 - 1. Compost filter socks shall conform to Subsection 206.02.4 of the State Standards and all Federal and State regulations.
 - 2. Compost filter tube shall be in accordance with AASHTO Designation MP 9-06 (2007 or latest revision)
 - 3. Wood stakes shall be oak and conform to the dimensions shown on the plans.
 - 4. All material must be removed and disposed of by the contractor, at their expense, at the end of construction. Additional tubes shall be used as directed by the Engineer.
- B. Filter Fabric
 - 1. See Geotextiles in Division 2 Section 02200, Earthwork for specification.
- C. Sack Insert Catch Basin Inlet Protection as described in Subsection 209.02.3 of the State Standards

PART 3 - EXECUTION

3.1 PROVISION OF COMPOST FILTER SOCK

- A. In accordance with Subsection 206.03.4 of the State Standards, the project details and manufacturer's recommendations.

3.2 PROVISION OF SACK INSERT CATCH BASIN INLET PROTECTION

- A. In accordance with Subsection 209.03.3 of the State Standards, the project details and manufacturer's recommendations.

3.3 MAINTENANCE AND CLEANING OF EROSION AND POLLUTION CONTROLS

- A. In accordance with Subsection 212.03 of the State Standards.
- B. Repair all erosion controls at substantial completion and get inspection and approval of the condition of the protection from the Owner's Representative.

3.4 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to the Drawings. In the event that the Contract Drawings do not show all erosion controls required by applicable Federal, State, or local regulations, the Contractor shall install all said erosion controls to comply with applicable regulations. Additional controls installed in this manner, which are not shown on the Contract Drawings, shall not be a basis for additional monies for the Contractor

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- B. The Contractor shall place additional erosion and sedimentation controls as required by laws and regulations.
- C. The Contractor shall operate all equipment and perform all construction operations so as to minimize erosion. The Contractor shall cease any operations which will increase erosion during rainstorms.
- D. Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
- E. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.
- F. Following stabilization of the site and the receipt of permission from the Owner's Representative, the Contractor shall remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3.5 DISPOSAL

- A. Disposal: Remove surplus soil material, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property. Any potentially contaminated soil material encountered, as specified by the State of Rhode Island Environmental Management rules and regulations, shall be brought to the Rhode Island Resource Recovery Corporation or another appropriately licensed waste facility for legal disposal.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities.
- C. All temporary erosion control facilities and accumulated sediments shall be removed in a neat and workmanlike manner when all disturbed areas have been satisfactorily stabilized. Erosion controls shall be removed and properly disposed of at no additional cost to the Owner.

3.6 DEWATERING DISCHARGES

- A. All pumped discharges and surface water flow from work areas shall be passed through a filter barrier of straw bales before being discharged into gutters, ditches, drainage swales, storm sewer systems, wetlands, natural water bodies, streams, or rivers. The method of all such discharges shall be subject to the approval of the Owner. The sizing of sedimentation basins, if required, shall provide for a maximum velocity of 1 ft/s.

3.7 PREPARATION

- A. Restore damaged improvements to their original condition, as acceptable to Owner.

END OF SECTION

PART 1 GENERAL

1.1 GENERAL PROVISIONS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUBSURFACE INVESTIGATION

- A. Information Not Guaranteed: Information on the Drawings and in the Project, Specifications relating to subsurface conditions, natural phenomena, and existing utilities and structures is from the best sources presently available. Such information is furnished only for the information and convenience of the Contractor, and the accuracy or completeness of this information is not guaranteed.
- B. The Contractor shall coordinate with the Engineer for any available subsurface information.
- C. The Contractor shall perform pavement cores prior to the start of construction to verify pavement thickness needed for trench patching.

1.3 CONFIRMATION OF GRADES AND UTILITIES

- A. Prior to commencement of site excavating operations, the Contractor shall compare existing site grading and proposed new site grading. Where existing utilities are indicated but their inverts or depths are not, exploratory excavating shall be performed to assure that sufficient earth coverage will be attained during the course of new site grading.
 - 1. Utilities existing on the Site to remain in operation either permanently or during construction shall be carefully protected from damage. When an active utility line is exposed during construction, its location and elevation shall be plotted on the record drawings and the Engineer, and the utility owner notified in writing.
- B. If exploratory excavating confirms that the depth of existing utilities will be negatively impacted by proposed new grades (i.e., will be too shallow or become exposed), immediately notify the Engineer. Do not proceed with work in such areas until instructions are issued by the Engineer. Continue work in other areas.

1.4 CONFIRMATION OF INTEGRITY OF ADJACENT STRUCTURES

- A. Prior to commencement of site excavating operations, the Contractor shall compare depths of existing structures and proposed depths of new utilities. Where existing structures are indicated but their foundation depths are not, exploratory excavating shall be performed to assure that proposed new excavations adjacent to them, or in near proximity of them, will not undermine the structural integrity of the existing structures.
- B. If exploratory excavating confirms that the footing depths of existing structures may be negatively impacted or undermined by proposed new excavations, immediately notify the Owner. Do not proceed with work in such areas until instructions are issued by the Engineer. Continue work in other areas.

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PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION

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SECTION 02305

SUPPORT OF EXCAVATION AND DEWATERING

PART 1 - GENERAL

1.1 SCOPE

- A. The work covered in this section includes designing, furnishing, installing, maintaining, and removing excavation support and dewatering systems as required for construction of all underground structures and piping. The Owner anticipates the use of trench boxes/shields due to the depths of excavation. However, should the Contractor consider that other means of support of excavation are possible and preferable such as single-staged or multi-staged steel sheet pile walls, soldier piles and lagging, wood sheeting secured in place with bracing members, concrete diaphragm slurry wall, secant pipe walls, shotcrete, steel liner plates with supports, tiebacks, pre-grouting, any combination, or other system designed by the Contractor, then a design submittal signed and sealed by a Rhode Island licensed professional engineer should be submitted to the Owner and Engineer for review.
- B. The anticipated design loads required to be resisted by the support of excavation system are as indicated within the drawings.
- C. Where the design of excavation support is not indicated, the Contractor shall design the support of excavation for stability of the excavations and for safety during construction. The Contractor shall be responsible for the design, materials, and methods of construction as shown on accepted working drawings prepared and submitted by the Contractor. Design of these systems must be integrated with the permanent structures and cannot adversely affect these permanent systems.
- D. The Contractor is also responsible in designing, furnishing, installing and operating all necessary dewatering system to accomplish the construction prescribed in the Drawings and Specifications. The dewatering system shall be compatible with selected excavation support system.
- E. Support systems shall be provided, as necessary to:
 - 1. Comply with all applicable federal, state, and local safety and health codes and regulations.
 - 2. Permit the proper installation and construction of the work.
 - 3. Prevent injury to persons or damage to pavement, utilities, or structures.
 - 4. Prevent injurious caving, water intrusion, erosion, loss of ground, or were shown on the drawings as necessary for unforeseen reasons, or where directed by the Owner and Engineer, all in accordance with the Drawings and Specifications, and as directed.
 - 5. Be stable during all construction phases against unbalanced hydrostatic forces and piping.
 - 6. Limit the potential for adverse effects to the existing surrounding components including, but not limited to, utilities, roadways, residential and commercial developments including buildings and other structures, and all other existing surrounding components. The Contractor shall be responsible for repairing all damage caused as a result of construction activities. The Contractor shall be

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responsible for resolving/disputing all false claims of damage caused as a result of construction activities.

- F. Design, provide, install, operate, maintain, and remove a temporary dewatering system as necessary to:
1. Lower groundwater levels or hydrostatic pressure heads in the soils within the excavation limits to stabilize the bottom of the excavation.
 2. Maintain a dry and stable subgrade. Maintain dry conditions to allow for the placement and proper compaction of backfill material.
 3. Control and remove seepage, surface water, and precipitation in excavations.
 4. Provide sedimentation control to reduce total suspended solids in effluent prior to discharge.
 5. Construction dewatering shall be completed in such a way as to limit the potential for adverse effects to the existing surrounding components including, but not limited to, utilities, roadways, residential and commercial developments including buildings and other structures, and all other existing surrounding components. The Contractor shall be responsible for repairing all damage caused as a result of construction activities. The Contractor shall be responsible for resolving/disputing all false claims of damage caused as a result of construction activities.
- G. Design, provide, install, operate, maintain, and remove a temporary surface water control system which will divert surface water away from excavations, trenches, utilities, and all other work areas.

1.2 REFERENCES

- A. All work specified in this Section shall conform to “Standard Specifications for Road and Bridge Construction” of the Rhode Island Department of Transportation, latest revision, herein referred to as “State Standards.”

1.3 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.4 SUBMITTALS

- A. Submittals shall be provided in accordance with the requirements as specified in the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2. Construction shall not begin until shop drawings are reviewed by the Program Manager.
- B. Contractor’s proposed method. Where the design of excavation support is not furnished, submit complete details of the proposed method, including materials and equipment intended for use, the time required for each operation, and other pertinent information.

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- C. Submittals must include details of dewatering and water control, means of monitoring groundwater levels outside the excavations and methods of maintaining or reestablishing groundwater levels at prescribed elevations controlling groundwater ingress at the invert of the excavation and flows from the bedding material of existing sewers, specifics about temporary support loading and resistance to deflections and stress, and all appropriate information about the system selected.
- D. Working Drawings
1. Prepare and submit working drawings and calculations showing the method(s), staging, necessary details for excavation support systems and temporary support for work.
 2. Show all materials, sizes and members, connections, and methods and sequence installation and removal of the excavation support system. As part of the removal of the excavation support system, submit the plan and/or anticipated sequencing that will allow for all voids that develop both behind the support of excavation system and as a result of the removal of the excavation to be entirely filled with crushed stone, CLSM, or compacted soil fills.
 3. Working Drawings and design calculations, as a minimum, shall indicate the following:
 - a. Design criteria, including provided design loads and surcharge loads related to construction equipment, nearby structures and facilities. The Contractor may modify the design loads as required, but these shall be approved by the Owner and Engineer before proceeding with a modified design.
 - b. Details, arrangement and method of assembly and disassembly of proposed system and sequence of construction.
 - c. Connection details.
 - d. Full excavation depth.
 - e. Expected equipment loads.
 - f. Maximum design load carried by various members of support system.
 - g. Design calculations, for various stages of excavation and bracing removal.
 - h. Existing utility facilities. After checking locations by field investigations, revise drawings to show actual locations of facilities and excavation supports interference with proposed Work, and measures proposed to overcome such interferences.
 - i. Manufacturer's product data.
- E. Design Computations: The Contractor shall submit complete computations for the design of the excavation support system(s) proposed to be installed.
1. The design shall be in accordance with sound practice and modern, accepted principles of soil mechanics.
 2. The manufacturer's calculations or specifications for the trench boxes shall be provided.
 3. Excavation support systems design shall be based on earth pressures given on the Drawings and on information provided in the Geotechnical Report (Appendix A to Contract Documents).
 4. The design shall include the effects of all surcharges which may be reasonably anticipated. Designs must include surcharge loads related to construction equipment, nearby structures and facilities, and any other loads that may be imposed.

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5. The minimum factor of safety for each of the design conditions required to be considered shall be 1.50.
- F. All computations shall be made and stamped by a registered Professional Engineer, specializing in geotechnical construction, licensed to practice in the State of Rhode Island. The Contractor shall submit qualification and experience records for the registered Professional Engineer to the Owner and Engineer prior to performing the ground support design. Unless otherwise specified, the registered Professional Engineer shall have at least 5 years of experience, all in the last 10 years, in the design of the specific ground support systems to be used. The Professional Engineer shall be able to demonstrate completion of not less than three acceptable installations which have provided satisfactory performance.
- G. Other Submittals:
 1. The design and layout will be reviewed by the Owner and Engineer as to type and suitability, providing that the arrangements presented by the Contractor are satisfactory, but such review will not relieve the Contractor of the sole responsibility for the adequacy of the system, nor shall it be construed as a guarantee that the Contractor's proposed equipment, materials and methods for sheeting and bracing will be adequate for the work required at the locations of and for the work required by this contract.

1.5 QUALITY CONTROL

- A. Provide in accordance with the requirement as specified in Section 01400, Quality Control.
- B. Support of Excavation shall be of sufficient strength to safely sustain all loads from the sides of the excavations, together with reasonable surcharge.
- C. The Contractor shall, at all times, be entirely responsible for the adequacy of sheeting and bracing used:
 1. to permit the satisfactory and safe installation and construction of the work.
 2. to provide adequate protection against damage to all existing utilities, structures, and completed portions of the work; and,
 3. to prevent injury to persons.
- D. The Contractor shall control, and pitch, the grading to prevent water from running into the excavated areas of the structures, or to prevent damage to other structures or work already accomplished.
- E. Welding Operations – in accordance with AWS D1.1.
- F. Installation and testing of tiebacks shall be performed by personnel having a minimum of 5 years of experience, all in the last 7 years, in the design and installation procedures recommended by the manufacturer and shall be able to demonstrate completion of not less than three acceptable installations which have provided satisfactory performance.

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1.6 DESIGN CRITERIA

- A. This design criteria applies for the Contractor to specify, plan and design the excavation support and dewatering:
1. Design and specify the excavation support system in accordance with the earth pressures and other criteria indicated in the drawings and the conditions described by the Geotechnical Report where applicable.
 2. Design the excavation support system to support the earth pressures, utility loads, equipment and construction loads, and other surcharge loads to allow the safe and expeditious construction of the permanent structures without movement or settlement of the ground, and to prevent damage to, movement or settlement of, adjacent buildings, structures, or utilities.
 3. Design and specify a trench box excavation support system adequate to prevent lateral and vertical earth movement, and permit lowering of the indicated bottom of excavation.
 4. Design and specify the trench box bracing system to furnish sufficient reaction against the side banks to maintain stability in such banks.
- B. The design criteria for dewatering shall be as follows:
1. The methods of controlling water, inside and outside the excavation, shall be at the choice of the Contractor who shall be solely responsible for the design, furnishing, fabrication, performance, location, arrangement, and depth of any system or systems selected to accomplish the Work. These systems may include gravity wells, vacuum well-points, deep well pumps, or open pumping from sumps depending upon location on-site and soil conditions.
 2. Discharge of groundwater shall be in accordance with all permits.
 3. The Contractor shall manage on-site discharge of construction dewatering to prevent off-site surface runoff and damage to on-site construction. The Contractor shall control the discharge to prevent any spread and increase of contamination in any portion of the site.
 4. Sedimentation basins shall be included in the system design and the Contractor shall be responsible for implementing appropriate measures and/or using appropriate equipment to capture, remove, and dispose of sediments deemed unsuitable for discharge under the applicable Permit.
 5. If evidence of contamination is suspected or detected (visual or olfactory evidence, or through chemical test data), dewatering activities shall be modified immediately, and the Owner and Engineer shall be notified. In the case of suspected or detected contamination, water from dewatering shall be pumped directly from the excavation to fractional tanks. Sufficient tank storage capacity shall be provided to allow for storage during testing and temporary treatment without affecting the construction excavation progress.
- C. Design Computations: The Contractor shall submit complete computations for the design of the dewatering system(s) proposed to be installed.
1. The design shall account for all stages of construction (i.e., excavation, utility installation).
 2. Due to the sensitivity of surrounding structures and utilities, a minimum factor of

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safety of 2.0 shall be used in the evaluation of piping.

PART 2 - PRODUCTS

2.1 TRENCH BOXES

- A. The trench boxes specified and used shall be capable of supporting the ground pressures anticipated within the excavation.
- B. The trench boxes shall be well-maintained and inspected for defects at the start of each shift and before placing an excavation.

2.4 DEWATERING

- A. All materials and equipment shall be of appropriate type and maintained in proper operating condition.
- B. Materials and equipment shall be of suitable size, capacity and type to dewater the site soils and excavations; maintain dry and stable working surfaces; to pump, store, manage, treat and discharge dewatering effluent.
- C. Sedimentation tanks shall be of sufficient size and capacity to handle the dewatering flows, and to reduce suspended materials in the dewatering effluent in accordance with all permits obtained for the Project. The tank shall contain baffles to reduce velocities and allow sediment to settle inside the tank. At the discharge port, a filter cloth or bag assembly shall be installed to reduce the sediments in the discharge water.
- D. Maintain and employ adequate back-up equipment in the case of equipment breakdown.
- E. Provide a calibrated flow meter to measure the discharge flow rate and the total volume of water discharged.
- F. The Contractor shall provide any equipment and materials necessary for dewatering at his own expense.

2.5 OTHER MATERIALS

- A. The Contractor shall provide all hardware and fastenings necessary to accomplish satisfactory installation of all sheeting and bracing.

2.6 EQUIPMENT

- A. The Contractor shall use equipment with adequate capacity to complete the work.
- B. The Contractor shall use only equipment which will meet the noise limits defined in the Contract. If the Contractor's existing equipment exceeds these maximum noise levels, immediately remove the equipment from service, or take other remedial action to achieve compliance with the specifications.

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- C. The sheet pile and soldier piles shall be installed by means of suitable drivers as selected by the Contractor. All restrictions or ordinances on noise emissions from work sites shall be complied with.

2.7 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. The Contractor shall time delivery and installation of materials to avoid extended on-site storage, and to avoid delaying work of other trades. Keep materials protected during fabrication, delivery, storage, handling and erection. Keep timber dry during storage and provide for air circulation in stacks of timber.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General: Support of excavation systems shall be of sufficient strength to sustain all loads from the sides of the excavations, together with all surcharges.
- B. Trench walls shall be vertical. The practice of undercutting at the bottom or flaring at the top will not be permitted except where it is justified for safety at the Engineer's direction. In special cases, where trench flaring is required, the trench walls shall remain vertical to a depth of at least 1 foot above the top of the pipe. The trench bottom shall be square or slightly curved to the shape of the trenching machine cutters. The trench shall be accurately graded along its entire length to provide uniform bearing and support for each section of pipe installed upon the bedding material. Bell holes and depressions for joints shall be dug after the trench bottom has been graded and bedding installed. The pipe shall rest upon the new bedding material for its full length.
- C. The Contractor shall be entirely responsible for adequacy of the support of excavation systems used and shall take all precautions necessary to prevent movement of material along the sides of excavations, and to prevent the intrusion of water beyond that which the Contractor's pumping or well point system can control.
- D. Support of excavation systems shall be permanently left in place where indicated or directed.
- E. It is expressly understood and agreed that whenever support of excavation systems is used, it shall not relieve the Contractor of the sole responsibility for any damages, delays, or injury due to installation or failure of the support of excavation systems, or the settling of the backfill, the pipeline, or the adjacent ground.
- F. All systems shall be designed and installed so that excavation can be completed without unacceptable movement of existing soil.
- G. The Contractor shall complete the work in such a way to limit the potential for adverse effects to the existing surrounding components including, but not limited to, utilities, roadways, residential and commercial developments including buildings and other structures, and all other existing surrounding components. The Contractor shall be responsible for repairing all damage caused as a result of construction activities. The

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Contractor shall be responsible for resolving/disputing all false claims of damage caused as a result of construction activities.

3.2 TRENCH BOXES

- A. Trench boxes shall be installed to support the excavations.
- B. Stacked trench boxes shall be used in locations where the depth of excavation exceeds the height of one trench box. Only trench boxes designed to be stacked shall be used.
- C. The space between the excavation wall and trench box shall be filled with crushed stone to limit the deflection of the excavation wall, and to mitigate the risk of surface ground movement and settlement.
- D. If voids occur behind the shoring, they shall be filled immediately with proper material from earth excavation or other sources to the satisfaction of the Owner and Engineer.
- E. Withdrawal of shoring shall be carefully performed to prevent movement of material along the sides of the backfilled excavations, to prevent damage to utilities, structures, or the work, and to avoid injury to persons.
- F. Unless otherwise permitted, shoring shall be withdrawn in lifts of not more than four (4) feet, and all voids shall be filled immediately with selected materials.

3.3 ALLOWABLE GROUND DEFORMATIONS

- A. Immediately notify the Owner and Engineer if the following movements are exceeded:
 - 1. Vertical movement (heave/settlement on ground surface): 0.5 inch.
 - 2. Lateral movement (walls): 0.5 inch.

3.4 REMOVAL OF SUPPORTING SYSTEM

- A. When removing excavation support system, do not disturb or damage adjacent buildings structures, construction, or utility facilities.
- B. Removal of the excavation support system shall be sequenced in such a way that will allow for all voids that develop both behind the support of excavation system and as a result of the removal of the excavation to be entirely filled with crushed stone, CLSM, or compacted soil fills.

3.5 MAINTENANCE OF SOIL SUPPORTS

- A. Maintain a sufficient quantity of materials on hand throughout the conduct of work and other operations for protection of the work and for use in case of accident or emergency.

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3.6 DEWATERING SYSTEM

- A. The Contractor shall adapt and modify the dewatering and sedimentation treatment system(s) as required throughout the course of the Work to meet the requirements of the Work. The Contractor shall be responsible for designing, providing, installing, operating, monitoring and maintaining the dewatering systems(s).
- B. Maintain site, construction dewatering equipment, and subsurface drainage in an acceptable manner during the course of the Work. Collect and discharge surface water, seepage, precipitation, groundwater and other water which may enter excavations. Control the inflow of water at all times during construction, to prevent groundwater lowering outside the site limits and to permit all work to be performed in-the-dry.
- C. Provide, install, maintain, and operate pumps, wells, sumps and related equipment, including standby equipment, of sufficient capacity to adequately dewater excavations until the required construction, installation, and backfilling of underground structures are completed to a level above the water level. When installing structures that may be subject to buoyant forces, maintain dewatering operations until sufficient structure dead weight or backfill is placed to resist uplift forces.
- D. All wells or sumps shall be surrounded by suitable filter fabric, crushed stone, or other acceptable materials to prevent the migration or pumping of fine-grained materials and subgrade disturbance.
- E. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Dispose of water in a manner that avoids inconvenience to others.
- F. Maintain site grades to direct surface runoff to collection points. Prevent surface water from running or collecting over prepared subgrades or fill surfaces. Do not permit standing water to accumulate in excavations.
- G. Provide sumps, dewatering basins, sedimentation tanks, and other flow-control devices to avoid erosion and sedimentation.
- H. Modify dewatering procedures which cause or may cause damage to new or existing facilities. Modifications to dewatering system(s) shall be made at no additional cost to the Owner.
- I. All dewatering system(s) shall include methods to remove sediment and suspended particles from the dewatering effluent to comply with permit requirements. These methods shall include, as a minimum, baffled sedimentation tank(s) of sufficient size, and other measures, as required.
- J. Direct discharges to storm drains will be unacceptable unless proper sediment and siltation removal devices are installed prior to discharge to the storm water conveyance system.

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- K. If sediment or other materials discharged from the dewatering system accumulates in the storm drains or other utilities, the Contractor shall completely clean and remove all sediment from impacted utilities to the satisfaction of the State and the owner of the utility, at no additional cost to the State nor the utility owner.
- L. Provide standby equipment on-site, installed and available for immediate operation, to maintain dewatering on continuous basis if any part of system becomes inadequate or fails. If dewatering requirements are not satisfied due to inadequacy or failure of dewatering system, restore damaged structures and foundation soils at no additional expense to Owner.
- M. Remove dewatering system from Project site on completion of dewatering. Plug or fill well holes with sand or cut off and cap wells a minimum of 36 inches below overlying construction.
- N. Damage including but not limited to erosion or sedimentation, resulting from untreated dewatering discharges shall be restored to meet or exceed the existing condition. All remedial work shall be completed in accordance with local and State Environmental Regulations and Requirements
- O. Permanent utilities and piping shall not be used as part of dewatering system(s).
- P. Remove and backfill dewatering elements when no longer required, using methods acceptable to Owner and Engineer. Backfill any voids resulting from dewatering system removal with suitable material to prevent potential loss of ground.
- Q. Inform the Owner and Engineer in writing of any changes made to accommodate field conditions.

3.7 PROPERTY LOSSES FROM REMOVAL OR DISTURBANCE OF GROUNDWATER

- A. Any structure, including but not limited to embankments, buildings, streets, and utilities that become unstable or vulnerable to settlement due to removal or disturbance of groundwater will be supported immediately by the Contractor. Support shall include but not be limited to bracing, underpinning, or compaction grouting.
- B. All loss or damage arising from removal or disturbance of groundwater, including but not limited to claims for subsidence and the loss of structure support, which may occur in the prosecution of the work shall be sustained and borne by the Contractor. If the Contractor needs to correct the damage resulting from his operations, the Owner may, 30 days after notifying the Contractor in writing, proceed to repair, rebuild or otherwise restore such damaged property as may be deemed necessary, and the cost thereof shall be deducted from compensation which may be or become due the Contractor under this Contract.

END OF SECTION

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

- A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS, which are hereby, made a part of this Section of the Specifications.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.
- C. Coordinate work with that of all other trades affecting or affected by work of this Section. Cooperate with such trades to assure the steady progress of all work under the Contract.
- D. All demolition shall be in accordance with the "Standard Specifications for Road and Bridge Construction" of the Rhode Island Department of Transportation, latest revision, herein referred to as "State Standards," excluding the provisions of Part 100- General Requirements and Covenants and any reference to measurement and payment, all public and private utility company requirements, and all other applicable local, state, and federal requirements.

1.2 WORK DESCRIPTION

- A. The Contractor shall perform all work and supply all labor, material, tools and equipment necessary to:
 - 1. Demolish, remove, and dispose of items not required for reuse, salvage, or to remain onsite and as indicated on Drawings or that exist within the Project limits. The general scope of site demolition is shown on the plans. This shall include, but is not limited to removal and legal disposal of: pavement, concrete curbing, concrete sidewalks, trees, roots, stumps, drainage systems including pipes, frame and covers, frame and grates, stone, filter fabric, catch basins and manholes, sanitary sewer system including pipes, bends, stone and filter fabric, and all other existing site features within the path of construction or as noted on the plans.
 - 2. Any portion of the site soils anticipated by the Contractor for reuse on the project shall be stockpiled and tested by the Contractor for source investigation of potential reuse of material. Soil materials to be reused onsite may require amendment including blending of onsite and imported soil materials or recycled bituminous pavement less than 1.5" dia.
 - 3. Disposal of items to an approved legal off-site disposal or recycling facility.
 - 4. Cleaning of catch basins, drainpipes to remain and drain manholes within the limit of work.
 - 5. Abandoning existing drainage pipes in place, including cutting, and capping of the existing system at locations shown on the plans.
 - 6. Filling voids and excavations resulting from the work per Section 02200, Earthwork.
 - 7. Removing existing above- and below-grade site features.
 - 8. Remove and dispose isolated trees.
 - 9. Removal of existing utility structures (including but not limited to catch basins and manholes) and piping (sewer and drainage) as indicated on the Drainage and Utility Plan.
 - 10. Removal from the site and legal disposal of all materials resulting from the demolition and construction operations except those specified to be stockpiled or reused.
 - 11. Removal of all additional site items required to complete the work, as shown on the plans.
 - 12. Stockpiling of materials for reuse by the Owner.

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- B. Related Sections include the following:
 - 1. Section 01501, Temporary Controls
 - 2. Section 02200, Earthwork
 - 3. Section 02750, Abandonment of Existing Sewers and Drains
 - 4. Section 02767, Dispose of Materials

1.3 SUBMITTALS

- A. Submit at least 1 week prior to the start of demolition:
 - 1. Permits for transport and disposal of debris.
 - 2. Permits and notices authorizing demolition.
 - 3. Demolition Work Plan including permits, procedures, and operational sequence.

1.4 PERMITS AND CODES

- A. All work shall comply with all codes, rules, regulations, laws and ordinances for the City of Pawtucket, the State of Rhode Island, the US EPA, and all other authorities or agencies having jurisdiction. All work necessary to make site demolition comply with such requirements shall be provided without additional cost to the Owner.
- B. The Contractor shall procure and pay for all permits and licenses required for work under this Section.
- C. The Contractor shall not close or obstruct any streets or passageways, unless and until the Contractor shall have first secured all necessary municipal, State, or other permits thereof. No material whatsoever shall be placed or stored, nor shall parking be permitted in streets or passageways. The Contractor shall conduct operations to interfere as little as possible with the use ordinarily made of both on-site and off-site roads, driveways, sidewalks, and other facilities near enough to the work to be affected thereby.

1.5 DISPOSITION OF EXISTING UTILITIES

- A. Active utilities existing on the site shall be carefully protected from damage and relocated or removed within limits of the work. When an active utility line is exposed during construction, its location and elevation shall be recorded, and both the Engineer and the Owner notified in writing.
- B. Abandoned utilities encountered during construction operations shall remain. The location of such utilities shall be noted and reported in writing to the Engineer.

1.6 QUALITY ASSURANCE

- A. Pre-Construction Conference: Conduct meeting at Project site to comply with Project Meeting Requirements in Section 01200, Meetings.

1.7 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from the Engineer and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
- B. Utility Locator Service: Notify utility locator service for area where Project is located before commencing any site work.
- C. Do not commence site clearing operations until temporary erosion and sedimentation control measures are in place and all permits are obtained.
- D. Contractor is responsible for all construction phase, registrations, notifications, and applications.

PART 2 - PRODUCTS

2.1 DEMOLITION PRODUCTS

- A. Contractor shall not use any explosives for demolition.
- B. No crushing or recycling shall be performed onsite without Owner and jurisdictional approval.

PART 3 - EXECUTION

3.1 WORKMANSHIP

- A. Before beginning demolition work, coordinate with utility companies and disconnect all utility service lines to the structures shown to be demolished. Notify the proper local authorities and utility companies, in writing before work commences. Remove all utility and service lines in accordance with the authorities and/or companies having jurisdiction over such work. Identify the location and size of all caps and plugs to the Engineer in writing.
- B. Take all possible precautions to avoid damaging those materials, which are to be salvaged or reused on the site.
- C. Demolition work shall be carried out in a careful and orderly manner. Provide adequate protection to persons and property inside and outside of the site.
- D. Do not commence work until trees and other items to be saved have been protected as directed by the Engineer and as shown on the Demolition Plans in the field. Protection shall remain for the duration of the work.
- E. Do not burn any material or debris on the site.
- F. Take all possible precautions to avoid damaging those materials which are to be salvaged or reused on the site.

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3.2 TITLE, SALVAGE AND REUSE

- A. Property belonging to public bodies or public service companies shall not become the property of the Contractor, unless written authorization is given by the Owner.
- B. All other salvage and materials resulting from the Demolition work shall become the property of the Contractor unless otherwise directed by the Engineer or specified herein or on the Contract Drawings to be stockpiled and shall be removed from the site.
- C. The existing condition of all materials specified to be: Removed and Reset, Removed and Stockpiled, or Removed and Stockpiled for the Owner; shall be recorded in a video provided in electronic format to the Engineer for approval. Any damage or condition not noted in the recorded video approved by the Engineer will be deemed damage caused by the Contractor and the Contractor shall replace the feature at no additional cost to the Owner.

3.3 REMOVAL

- A. Demolish and remove the aforementioned items in their entirety.
- B. Remove and legally dispose of, at no cost to the Owner, all materials and debris resulting from the Demolition work except those specified herein to be stockpiled. Leave the site in safe and clean condition.

3.4 RESTORATION OF SITE ITEMS

- A. Wherever streets, lawns or other items outside the Contract Limit Lines have been excavated in fulfilling the work required under this Contract, the Contractor shall furnish and install all material at no cost to the Owner to bring finish surfaces level with the existing adjacent conditions. All work shall be installed to match the existing conditions. Notify the proper authorities prior to restoring surfaces outside the Limit of Work to assure conformance to existing requirements.

3.5 GENERAL

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Depressions, excavations and voids resulting from demolition shall be filled with suitable material as outlined in Section 02200, Earthwork.
- C. Conduct demolition operations in a manner that will prevent damage to adjacent structures, utilities, pavements and other facilities to remain.
- D. Cease operations immediately if any damage, settlement or other adverse effect on adjacent structures occurs. Immediately notify the Engineer and regulatory authorities. Do not resume operations until conditions are corrected, damage repaired, and approval received from the Engineer.

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- E. Provide hoses and water connections. Spray water onto demolition to prevent dust.
- F. Grade site and stockpile material to prevent runoff from leaving the site.
- G. Clean neighboring properties and improvements of dust, dirt, and debris caused by demolition operations. Return properties to conditions prior to start of work.
- H. Demolition limits of existing pavement shall be saw-cut along straight lines resulting in clean vertical edges.
- I. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Engineer.

3.6 UTILITIES

- A. Notify all corporations, companies, individuals, or local authorities owning or having jurisdiction over utilities running to, through, or across areas to be affected by demolition operations.
- B. The Contractor shall mark locations of underground utilities prior to initiating site work; Dig-Safe clearance shall be obtained.
- C. The Contractor shall exercise reasonable care to verify locations of existing subsurface structures and utilities.
- D. Have all discontinued utility services disconnected in accordance with the requirements of the utility owner. Utilities shall be abandoned in accordance with details shown on the Drawings and per the requirements in Section 02750, Abandonment of Existing Sewers and Drains.

3.7 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.
- B. Remove paving, sidewalks, curbs, gutters, and sub-base as indicated.
 - 1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut length of existing pavement to remain before removing existing pavement. Saw-cut faces vertically.

3.8 DISPOSAL

- A. Disposal: Remove surplus soil material, unsuitable topsoil, unsuitable soils, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off site.
- B. Separate recyclable materials produced during site clearing from other non-recyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities.
- C. All disposals relating to the sewer work shall conform to Section 02767- Disposal of Materials.
- D. Excess suitable/clean soil material will become the property of the Contractor.

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3.9 REMOVE AND DISPOSE FLEXIBLE PAVEMENT, CURBING AND CONCRETE WALKS

- A. All pavement, sub-base course, sidewalks, curbs, gutters, of whatever nature designated to be removed shall be so removed and legally disposed of within the limits shown. Where the remainder of the existing pavement or sidewalks is to remain undisturbed, a clean saw cut shall be made to separate the remaining pavement from that being removed.

3.10 SOLID WASTE

- A. The Contractor shall legally dispose of all solid waste generated as a result of this project at a licensed solid waste facility. The Contractor shall maintain all bill of landing documentation to document legal off-site disposal.
- B. Solid waste shall be stored, transported, and disposed of in accordance with the Rhode Island Department of Environmental Management's Solid Waste Regulations, latest edition.

3.11 HAZARDOUS WASTE

- A. Should the Contractor encounter hazardous waste or hazardous materials as a result of this project, the hazardous waste and materials shall be removed, transported, and disposed of in accordance with the Rhode Island Department of Environmental Management's Hazardous Waste Regulations, latest edition.
- B. Should the Contractor encounter contaminated soil in any excavation he shall notify Engineer immediately.

END OF SECTION

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SECTION 02530 RESTORATION OF CURB, SIDEWALKS, AND VEGETATED AREAS

PART 1 – GENERAL

1.1 SUMMARY

A. Section Includes

1. Requirements for removal and replacement of concrete curb, concrete sidewalks including sidewalks and wheelchair ramps.
2. Requirements for restoration of vegetated areas, plantings, and tree beds.
3. Requirements for construction of sidewalks in sensitive tree areas.
4. Restoration to include those areas designated by the Contract Drawings and those affected or damaged by the construction operations, outside the limits of Work.

B. Related Sections

1. Section 02200 – Earthwork
2. Section 02900 – Landscaping

C. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 REFERENCES

- A. This specification makes reference to the requirements of additional specifications as listed. The Contractor shall obtain and familiarize himself with all requirements referenced by this specification prior to preparation and installation of any pavements.
- B. All work specified in this Section shall conform to "Standard Specifications for Road and Bridge Construction" of the Rhode Island Department of Transportation, latest revision, herein referred to as "State Standards" excluding the provisions of Part 100- General Requirements and Covenants and any reference to measurement and payment.

1.

1.3 SUBMITTALS

- A. Submit in accordance with the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2 and the following:
1. Sieve analysis for aggregates and loams.
 2. Mix designs for batched materials.
 3. Certifications for landscape material.
 4. Samples when requested by the Engineer.

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1.4 COORDINATION WITH CITY TREE WARDEN

- A. The Contractor shall notify Owner and Engineer in advance of all work that may impact existing trees or tree roots. This includes any required tree trimming or root pruning or excavation of sidewalks or structures encumbered by tree roots, in order to perform the Work as detailed by the Contract Drawings. Contractor is made aware that tree trimming and root pruning along the project may require advanced coordination with the Owner.
 - 1. Contractor shall minimize disturbance to trees during the performance of its work to the greatest extent possible.
 - 2. The Contractor shall prepare and submit a list of areas subject to possible tree trimming and root pruning for review, based on the Contractor's proposed schedule.
 - 3. The list shall be submitted in advance of the construction in order to avoid delays. The time limit required for review shall be coordinated with Owner and Engineer.
 - 4. Contractor is made aware that upon review, some locations identified by Contractor may be identified, and require handling, as a "Sensitive Tree Area".

PART 2 – PRODUCTS

2.1 MATERIALS

A. Gravel Borrow

- 1. In accordance with State of Rhode Island Standard Specification, Subsection M.01.02, meeting the gradation requirements of Table 1, Column 1, with 100% passing the 3-inch Square Mesh Sieves.

B. Cement Concrete

- 1. In accordance with the requirements of Section M.02 of the Standard Specifications.

C. Loam, Seed, Lime, Fertilizer, Mulch and Water

- 1. In accordance with Section M.18 of the Standard Specifications.

D. Detectable Warning Panel

- 1. In accordance with the requirements of Section 942.02 of the Standard Specifications.

2.2 SOURCE QUALITY CONTROL

- A. The plants used by the Contractor for preparation of bituminous paving materials and cement concrete shall be acceptable to the Owner and Engineer who shall have the right to inspect the plant and the making of the material.

PART 3 – EXECUTION

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3.1 INSTALLATION/RESTORATION

- A. Excavation shall be in accordance with Section 02200, Earthwork unless noted otherwise by the referenced specifications below.
- B. Concrete Curb
 - 1. Installing new granite curb or removing, salvaging, and resetting existing granite curb at the locations indicated on the Drawings or as directed by the Engineer shall be in accordance with Section 906 of the Standard Specifications.
- C. Sidewalks and Wheelchair Ramps
 - 1. Installation of new or replacing existing sidewalks, driveways, and wheelchair ramps at the locations shown on the Drawings or as directed by the Engineer shall be in accordance with Section 905 of the Standard Specifications.
 - 2. Installation of new detectable warning panel at the locations shown on the Drawings or as directed by the engineer shall be in accordance with Section 942 of the Standard Specifications.
- D. Vegetated Areas, Plantings, and Tree Beds
 - 1. Restore all disturbed areas in accordance with Section 02900, LANDSCAPING and the following Sections of the Standard Specifications:
 - a. Loam in accordance with L.01.
 - b. Seeding in accordance with L.02; and
 - c. Plantings and Tree Beds in accordance with L.08.
- E. Restoration Limits
 - 1. Where the trench location is in a sidewalk, the entire width of the sidewalk shall be replaced with new material. Side forms shall be set so as to obtain and preserve a straight edge along both sides of the walk.
 - 2. Sidewalks shall be cut at existing joints or as directed otherwise by the Engineer.
 - 3. Where trench is in a driveway, the driveway shall be repaved across its entire width with even edges.
- F. Restoration Outside Limits of Work
 - 1. Sidewalks, driveways, parking lots and curbing that are damaged by the Contractor's operations shall be restored to a condition at least equal to that in which they are found immediately prior to the start of operations. Materials and methods used for such restoration shall be in conformance with the requirements of the Standard Specification.
 - 2. There shall be no cost to the Owner for this work.

END OF SECTION

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SECTION 02601

MANHOLES AND CATCH BASINS

PART 1 – GENERAL

1.1 GENERAL PROVISIONS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 WORK TO BE PERFORMED

- A. The work covered in this Section of the Specifications includes construction and placement of all precast reinforced drainage manholes, catch basins, castings for grates, covers and frames, rungs and all appurtenant and incidental work, complete, in strict accordance with the Specifications and the applicable Drawings.

1.3 REFERENCES

- A. All work specified in this Section shall conform to the to the manufacturer's specifications and the "Standard Specifications for Road and Bridge Construction" of the Rhode Island Department of Transportation, latest revision, herein referred to as "State Standards," excluding the provisions of Part 100- General Requirements and Covenants and any references to measurement and payment.
- B. American Society for Testing and Materials Standards.
 - 1. All gray iron castings shall conform to the requirements of AASHTO Designation M105, Class 30 and ASTM A48-74. Test both cover and frame, for H-20 Highway Loading.
 - 2. Ductile iron castings shall conform to ASTM A 536. Grade 60-40-18 unless otherwise specified.
 - 3. Cast steel shall conform to ASTM A27. Grade 70-36 and shall be thoroughly annealed.

1.4 SUBMITTALS

- A. Submittals for the following items shall be made in accordance with the requirements as specified in the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2.
 - 1. The drawings shall show the setting plans, exact profile of each unit, openings required, all inserts and other items which are to be embedded in the units.
 - 2. Shop drawings showing details of manhole cover and frame, catch basin frame and grate, manhole step castings, construction details, reinforcement information, tolerances and other required information.
 - 3. Rubber Boot Connection: Provide product specifications, materials, manufacturer's information, and recommended installation procedure.
 - 4. Conformance Certificate: Each shipment of castings and concrete manholes and catch basins shall be accompanied with the manufacturer's notarized certification that materials meet specified requirements.

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1.5 QUALITY CONTROL

- A. Shall be in accordance with Section 01400, Quality Control and the following:
 - 1. All pre-cast concrete shall be the product of a manufacturer who has demonstrated capability to produce pre-cast concrete products of the quality specified. A manufacturer must be able to show that he has experienced personnel, physical facilities, established quality control procedures, and a management capability sufficient to execute the work of this contract. When requested by the Engineer, the Contractor shall submit written evidence of the above requirements.
 - 2. Experienced plant personnel shall closely supervise the manufacturing process, and daily records of concrete strength shall be kept and submitted to the Engineer for control.
 - 3. Provide at least one person who shall be present at all times during execution of this portion of the work and who shall be thoroughly trained and experienced in the installation of the pre-cast concrete structures and shall direct all work performed under this Section.
 - 4. Where exploratory test holes have been required at specific locations on the drawings or as directed by the Engineer that may impact horizontal a/or vertical alignment of the proposed drain or sewer. Contractor shall perform these test holes in the Engineer's presence prior to authorizing fabrication of manholes.

1.6 PRODUCT HANDLING

- A. Materials and equipment shall be progressively delivered at the site so that there will be neither delay in the progress of the work nor an accumulation of materials that is not to be used within a reasonable time. Materials shall be so stored as to assure the preservation of their quality and fitness for the work.
- B. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located so as to facilitate their prompt inspection.
- C. Private property shall not be used for storage purposes without written permission of the Owner, and if requested by the Engineer copies of such written permission shall be furnished to him/her. All storage sites shall be restored to their original condition by the Contractor at his expense
 - 1. Avoid damage to castings from impact, abrasion, or corrosion during handling and storage.
 - 2. Use all means necessary to protect pre-cast concrete units and materials before, during and after installation and to protect the installed work and materials for all other trades.
 - 3. In case of damage, immediately make all repairs and replacements necessary to the approval of the Engineer and at the Contractor's expense.

PART 2 - MATERIALS

2.1 PRECAST CONCRETE SECTIONS

- A. Cement shall be Portland cement conforming to ASTM C150, Type II, except as otherwise approved.
- B. Aggregate: shall conform to ASTM C330 and shall be graded, crushed stone with a resulting unit weight of concrete of up to one hundred fifty-five (155) pounds per cubic foot, and a minimum unit weight of not less than one hundred forty-eight (148) pounds.

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- C. Water: shall be clear and free of injurious and deleterious substances.
- D. Concrete: shall have a minimum strength of 4000 psi at twenty-eight (28) days and strength of 3000 psi at the time of form release.
1. During the process of manufacturing of the units not less than two (2) test cylinders shall be tested at time release of the form and two (2) at age twenty-eight (28) days.
 2. All compression test cylinders shall be made, cured and stored in accordance with ASTM C31. Cylinders shall be tested in accordance with ASTM C39.
 3. All concrete shall contain three (3) to five- (5) percent air entrainment.
- E. The wall thickness of precast sections shall be designated on the drawings, meeting the following minimum requirements:

<u>Section Diameter (Inches)</u>	<u>Minimum Wall Thickness (Inches)</u>
48	5
60	6
72	7
96	10

- F. Admixtures shall only be used after prior approval of the Engineer.
- G. All reinforcing bars shall conform to the requirements of ASTM designation: A615, Grade 60 and comply with Section 901.61 of the Standard Specification.
- H. Welded wire fabric shall conform to the requirements of ASTM designation: A185.
- I. Sections shall be steam cured and shall not be shipped until at least five (5) days after having been cast.
- J. No more than two lift holes may be cast or drilled in each section.
- K. The date of manufacture and the name or trademark of the manufacturer shall be clearly marked on the inside of each precast section.
- L. Acceptance of the sections will be on the basis of material tests and inspection of the completed product.
- M. Circumferential steel reinforcement in walls and bases shall be a minimum of 0.12 sq. in./lin. ft. for 4-foot diameter sections, 0.15 sq. in./lin. ft. for 5- foot diameter sections, 0.18 sq. in./lin. ft. in 6-foot diameter sections and 0.24 sq.in/lin. ft. for 8-foot diameter sections. Reinforcing shall extend into tongue and groove.
- N. Conical reducing sections shall have a wall thickness not less than 5 inches at the bottom and wall thickness of 8 inches at the top. Conical sections shall taper from a minimum of 48 inches diameter to 30 inches diameter at the top, as shown on the Drawings.

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- O. Except where insufficient depth of cover dictates the use of a shorter base, bases shall be a minimum of 4 feet in height.
- P. Slab top sections and flat riser sections (Grade Rings) shall conform to the contract drawings, with particular attention focused upon the reinforcing steel and be designed to meet or exceed an H-20 loading requirement.
- Q. The tops of the bases shall be suitably shaped by means of accurate ring forms to receive the riser sections.
- R. Precast sections shall be manufactured to contain wall openings of the minimum size to receive the ends of the pipes, such openings being accurately set to conform with line and grade of the sewer or drain. Subsequent cutting or tampering in the field, for the purpose of creating new openings or altering existing openings, will not be permitted except as directed by the Engineer. Precast opening shall maintain a minimum undisturbed distance of 6" from manhole section joints. Flexible rubber boot shall be neoprene with stainless steel clamps and bands.
- S. The exterior surfaces of all precast manhole bases, walls, and cones shall be given a minimum of one shop coat of bituminous waterproofing compound.
- T. The Engineer reserves the right to reject any unsatisfactory precast section and the rejected unit shall be tagged and removed from the job site immediately.
- U. The Engineer may also require the testing of concrete sections as outlined under Physical Requirements in ASTM C478 with the Contractor bearing all testing costs.
- V. All materials used for work of this Section shall be new, unused and purchased specifically for this Contract. All materials shall be manufactured in the United States. Precast Concrete Manhole and Catch Basin Sections shall be similar or equal to that shown on the Drawings and shall conform to ASTM Specifications C-478 with the following exceptions and additional requirements herein. The horizontal joints between Sections shall be sealed using a flexible butyl resin sealant and shall conform to AASHTO M-198B. In addition, the horizontal joints on the inside and outside of the manhole and catch basin shall be sealed with a "Quick Plug."
- W. The precast bases shall be supported on a compacted level foundation of crushed stone at least 6-inches thick
- X. The Engineer reserves the right to reject and unsatisfactory precast section and the rejected unit shall be tagged and removed from the job site immediately.
- Y. The Engineer may also require the testing of concrete sections outlined under Physical Requirements in ASTM C478 with the Contractor bearing all testing costs.

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2.2 BRICK MATERIALS

- A. Brick shall be sound, hard and uniformly burned brick, regular and uniform in shape and size, of compact texture, and satisfactory to the Engineer. Brick shall conform to ASTM Specification C-32 for Grade SS, hard brick, except that the mean of five tests for absorption shall not exceed 8 percent by weight.
- B. Rejected brick shall be immediately removed from the work and brick satisfactory to the Engineer substituted.
- C. Mortar shall be composed of Portland cement, hydrated lime, and sand in which the volume of sand shall not exceed three times the sum of the volumes of cement and lime. The proportions of cement and lime shall be directed and may vary from 1:1/4 for dense hard-burned brick to 1:3/4 for softer brick. In general, the mortar for Grade SS Brick shall be mixed in the volume proportions of 1:1/2 :4-1/2; Portland cement to hydrated lime to sand.
- D. The sand shall comply with ASTM C144 specifications for "Fine Aggregate," except that all of the sand shall pass a No. 8 sieve.
- E. Hydrated lime shall be Type S conforming to ASTM C207
- F. The dome of the manholes shall be a precast concrete Section. The top 6-inches of the dome, not to exceed 12 inches, shall be built of brick and mortar to permit adjustment of the frame to meet the ground surface.
- G. Cement shall be Type II Portland cement as specified for concrete masonry.

2.3 DRAINAGE MANHOLE FRAMES AND COVERS

- A. Manhole Frames and Covers shall have a hot-dipped bituminous coating and form to the details on the Drawings. Cast iron shall conform to ASTM A-48, Class 25. The underside of the cover and upper side of lip frame must present parallel plane surfaces, and at these points of contact, the frames and covers shall be machined to prevent covers from rocking in the frames under traffic.
- B. Castings shall be of good quality, strong, tough, even-grained cast iron, smooth, free from scale, lumps, blisters, sandholes, and defects of every nature which would render them unfit for the service for which they are intended. Contact surfaces of covers and frame seats shall be machined to prevent rocking of covers.
- C. Covers shall bear evenly in the frame and both frame seats and covers shall be accurately fabricated so that covers are interchangeable for use with any and all frames. Where indicated, frames and covers shall be watertight, and locked. The sizes and weights (medium duty, heavy duty) are shown on the detail sheets for special manholes.
- D. All castings shall be thoroughly cleaned and may be subject to a careful hammer inspection at the Engineer's discretion.
- E. Castings shall be ASTM A48 Class 30B or better.

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- F. Manhole frames with 30-inch diameter covers shall be 425 pounds minimum and shall conform to City requirements.
- G. Covers shall have a non-slip surface and shall have the word “DRAIN” or “SEWER”, as applicable, inscribed.
- H. Frames and covers shall be installed on the manholes as indicated on the Drawings. They shall be well bedded and encased in cement mortar and accurately set to the grades indicated or as directed. Red clay brick with cement mortar shall be used to adjust grade of frame and cover. One half inch of cement mortar plaster cast shall be applied to exterior of red clay bricks.
- I. All frames shall be designed for H-20 wheel loading.

2.4 CATCH BASIN FRAMES AND GRATES

- A. Catch Basin Frames and Grates shall have a hot-dipped bituminous coating and conform to the details on the drawings. Cast iron shall conform to ASTM A-48, Class 25. The underside of the grate and upper side of lip frame must present parallel plane surfaces, and at these points of contact, the frames and grates shall be machined to prevent grates from rocking in the frames under traffic.
- B. Grate shall bear evenly in the frame and both frame seats and grates shall be accurately fabricated so that grate is interchangeable for use with any and all catch basin frames. The sizes and weights (medium duty, heavy duty) are shown on the detail sheets.
- C. Gratings shall have a non-slip surface.
- D. Gratings shall be installed on the catch basins as indicated on the Drawings. They shall be well bedded and encased in cement mortar and accurately set to the grades indicated or as directed. Red clay brick with cement mortar shall be used to adjust frame and grate. One half inch of cement mortar plaster cast shall be applied to exterior of red clay bricks.
- E. Catch basin frames and grates shall be as specified by the City of Pawtucket Department of Public Works or equal.
- F. Castings shall be of good quality, strong, tough, even-grained cast iron, smooth, free from scale, lumps, blisters, sandholes, and defects of every nature which would render them unfit for the service for which they are intended. Contact surfaces of grates and frame seats shall be machined to prevent rocking of grates.
- G. Castings shall be ASTM A48 Class 30B or better.
- H. All frames shall be designed for H-20 wheel loading
- I. All castings shall be thoroughly cleaned and may be subject to a careful hammer inspection at the Engineer's discretion.

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2.5 WATERPROOFING

- A. Asphalt for waterproofing catch basin and manhole structures shall conform to ASTM D449, Type A. Asphaltic prime coat shall conform to ASTM D41

2.6 MANHOLE STEPS

- A. Steps shall conform to ASTM C-478 and Fed. Spec. FS RR-F-621.
- B. Manhole steps shall be manufactured of either extruded aluminum or Copolymer Polypropylene plastic with ½- inch, grade 50 steel reinforcement.
- C. The capacity of each step shall be 1000 lb. At 6-inch distance from wall, 1500 lb. At 4-inch distance from wall.
- D. Steps shall measure 12 inches wide (min.) and extend 6 inches from wall.
- E. Manhole steps shall be provided in each base, riser and top Section and shall be integrally cast in each; 12 inches O.C.

2.7 SEWER MANHOLE ACCESSORIES

- A. Gasket Materials shall be top grade (100% solids, vulcanized) butyl rubber and shall meet or exceed AASHTO M-198
- B. Couplings at the manhole-pipe interface shall be made with a rubber seal system (with or without stainless steel straps) meeting the requirements of ASTM C923 and recommended for this type of connection.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine the substrate and conditions under which work of this Section is to be performed, and correct unsatisfactory conditions that would prevent proper and timely completion of the work. Do not proceed until satisfactory conditions have been corrected.
 - 1. Examine castings for blowholes, porosity, hard spots, shrinkage, distortion or other defects. Check coating for smoothness and tenacity.
- B. The installation of all pipes of various materials, structures, and connections to existing pipes/structures shall be made at the locations and elevations as shown on the Drawings.
- C. All materials and each part of detail of the work shall be subject to inspection by the Engineer. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the contractor as is required to make a complete and detailed inspection, (such assistance may include furnishing labor, tools, equipment, at no expense to the Engineer.)

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- D. If the Engineer so requests, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering or the removing and the replacing of the covering or making good of the parts removed, will be at the Contractor's expense.
- E. Any work done or materials used without authorization by the Engineer may be ordered removed and replaced at the Contractor's expense. The Contractor shall furnish written information to the Engineer stating the original sources of supply of all materials manufactured away from the actual site of the work. In order to insure a proper time sequence for required inspection and approval this information shall be furnished at least two weeks in advance of the incorporation in the work of any such materials.
- F. For the purpose of observing work that affects their respective properties, inspectors for the municipalities, public agencies and the utility companies shall be permitted access to the work, but all official orders and directives to the Contractor will be issued by the Engineer.
- G. The inspection of the work shall not relive the contractor of any of his obligations to fulfill the terms of the Contract as herein prescribed by the Drawings and Specifications.
- H. Failure to reject any defective work or materials shall not in any way prevent later rejection when such defect is discovered, nor obligate the Owner to make final acceptance.
- I. The Contractor shall give prior notice to the Engineer when work on the various items is to be performed by him or his Subcontractors. If work is suspended on any item, prior notice shall be given to the Engineer before resumption of such work.
- J. All storm drain lines shall be given combined pressure and leakage tests as detailed by the City of Pawtucket Department of Public Works.

3.2 GENERAL

- A. Excavation and backfilling requirements for installation of manhole and catch basin structures shall be in accordance with the requirements as specified in Section 02200, Earthwork.
- B. Manhole and catch basin barrel and cone Sections shall be set so as to be vertical and in true alignment.
- C. Where required for future connections, openings shall be cast in the manholes and catch basins at the proper location and shall be sealed with watertight brick bulkheads or plugs.

3.3 CONSTRUCTION AND INSTALLATION

- A. Bottom riser sections of reinforced concrete manholes and catch basins may be either cast-in-place or precast concrete. The top edges, of cast-in-place bottom sections, shall be formed with a removable steel ring template designed to fit the tongue end of the precast riser sections.

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- B. Concrete Base Slabs for manholes and catch basins shall conform to the requirements of Section 2.1 of this specification. The full thickness of the base slab shall extend 6 inches beyond the outside of the walls.
- C. Pipe Penetrations and Manhole Joints: Pipe joints into manholes and catch basins shall be constructed in accordance with the details shown on the Drawings. Complete details of the boot manufacture and installation shall be submitted for approval. All areas around pipes passing through walls of manholes and catch basins shall be completely filled with waterproof cement mortar to tightly fill any space through which water can pass. All manhole and catch basin joints between sections shall also be completely filled with waterproof mortar, both inside and outside, and coated with epoxy sealer inside and out.
- D. Bricks shall be laid in a workmanlike manner, true to line, and the joints shall be carefully struck and pointed on the inside. Bricks shall be thoroughly wet when laid and each brick shall be laid in mortar so as to form full bed, end and side joints in one operation. The outside of the brickwork shall be neatly plastered with ½" layer of cement mortar as the work progresses. The brickwork shall be satisfactorily bonded to the concrete and cast-iron frame. No brick masonry shall be laid in water, or any water allowed to rise on the brickwork until the masonry has set for at least 24 hours.
- E. Reconstruct Existing Brick Shelf and Invert and Core New Invert: Where called out on the plans the Contractor shall rebuild the existing brick shelf and invert for the re-alignment of the pipe. A new invert shall be cored in the structure and the existing patched.
- F. Waterproofing: All exterior surfaces of manholes and catch basins shall receive at least one coat of asphalt water proofing.

3.4 TESTING MANHOLES

- A. Vacuum testing shall be performed at each manhole. The initial test pressure shall be ten inches (10") of mercury, and the vacuum drop shall not exceed one inch (1") of mercury over the time period as follows:

<10' Deep Manholes:	2 minutes
10' – 15' Deep Manholes:	2.5 minutes
>15' Deep Manholes:	3 minutes
- B. The Contractor must explicitly identify what repairs or modifications he makes, at his expense, to the Engineer if need be. This test must be performed before the manhole is backfilled.
- C. If the manhole experiences any groundwater infiltration or leakage, the Contractor shall make proper repairs or replace the manhole and re-test at no additional compensation.

END OF SECTION

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SECTION 02614

REINFORCED-CONCRETE DRAINPIPE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes

- 1. Requirements for furnishing and installing reinforced-concrete pipe to where shown in the Drawings and directed by Owner or Engineer.

B. Related Sections

- 1. Section 02200 - Earthwork.

1.3 QUALITY ASSURANCE

A. Provide in accordance with Section 01400, Quality Control

- 1. Reinforced-concrete pipe shall be made by a manufacturer of established good reputation in the industry and in a plant adapted to meet the design requirements of the pipe.

1.3 REFERENCES

A. American Society for Testing and Materials (ASTM).

- 1. C33, Specification for Concrete Aggregates.
- 2. C76, Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe.
- 3. C361, Specification for Reinforced Concrete Low-Head Pressure Pipe.
- 4. C443, Specification for Joints for Circular Concrete Culvert and Sewer Pipe, Using Rubber Gaskets.

- B. All work specified in this Section shall conform to "Standard Specifications for Road and Bridge Construction" of the Rhode Island Department of Transportation, latest revision, herein referred to as "State Standards" excluding the provisions of Part 100- General Requirements and covenants and any reference to measurement and payment.

1.4 SUBMITTALS

- A. In accordance with the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2 submit for review drawings showing the pipe dimensions reinforcement, joint, and other details for each type and class of pipe to be furnished for the project. All pipe furnished under the contract shall be manufactured only in accordance with the specifications and the reviewed drawings.

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PART 2 – PRODUCTS

2.1 PIPE

- A. Each unit of pipe shall have an interior surface, which is free from roughness, projections, indentations, offsets, or irregularities of any kind. The pipe units shall be Class III unless specified otherwise on the drawings and shall conform to ASTM C76 with the following exceptions and additions:
1. Type II cement shall be used unless otherwise permitted by the Engineer. Admixtures shall not be used except with the prior permission of the Engineer.
 2. Aggregates shall conform to the requirements set forth hereinafter.
 3. Elliptical reinforcement will not be permitted. Longitudinal reinforcement shall be continuous. Reinforcement shall have a minimum cover of 3/4 in.
 4. Absorption shall be as specified under "Inspection, Tests and Acceptance."
 5. Pipe units have a minimum laying length of 8 ft., except as otherwise indicated or permitted by the Engineer.
 6. Pipe units shall be cured by subjecting them to thoroughly saturated steam at a temperature between 100 and 130 degrees Fahrenheit for a period of not less than 12 hours or, when necessary, for such additional time as may be needed to enable the pipe units to meet the strength requirements.
 7. Pipe units shall not be shipped until they have aged for at least 450 day-degrees which include the steam curing period. Day-degrees are the total number of days times the average daily air temperature at the surface of the pipe units (example: Five days at a daily average temperature of 60 degrees Fahrenheit equals 300 day-degrees). Wherever the average daily temperatures are below 60 degrees Fahrenheit, the Contractor shall submit to the Engineer records of average daily temperatures and number of days the pipe units have been cured.
 8. There shall be no lift holes in the pipe.
 9. Mortar used for repairs shall have a minimum compressive strength of 4,000 psi. at the end of 7 days and 5,000 psi. at the end of 28 days, when tested in 3-in. by 6 in. cylinders stored in the standard manner. Only those repairs permitted by the above-mentioned ASTM C76 will be allowed.
 10. The date of manufacture, class of pipe unit, size of pipe unit, and trademark of the manufacturer shall be clearly and permanently marked on the inside and the outside at one end of each pipe unit.
 11. Certified copies of tests on materials and the pipe units will be required.
- B. Specials, if required, shall conform to the specifications for straight pipe insofar as applicable. Special design or construction necessary for specials shall be subject to acceptance by the Engineer.

2.2 JOINTS

- A. Pipe joints shall be of the rubber gasket type in which the gaskets are in compression and which will permit both longitudinal and angular movement. Each unit of pipe shall be provided with proper ends made of concrete formed true to size and formed on machined rings to ensure accurate joint surface. Joints and gaskets shall be O-ring or ribbed gasket type and shall conform to the requirements of ASTM C443, or ASTM C361 and to the additional requirements specified.

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2.3 INSPECTION, TESTS AND ACCEPTANCE

- A. Acceptance will be on the basis of tests of materials, absorption tests, plant load-bearing tests, pressure tests, and inspection of the complete product. The required tests are enumerated hereinafter. The quality of all materials used in the pipe, the process of manufacture, and the finished pipe shall be subject to inspection by the Engineer. Inspection may be made at the place of manufacture, or on the work site after delivery, or both, and the pipe shall be subject to rejection at any time due to failure to meet any of the specification requirements, even though sample pipe units may have been accepted as satisfactory at the place of manufacture. All pipe which is rejected shall be immediately removed from the project site by the Contractor.
- B. Tests and certified copies in triplicate of test results will be required for the materials and the finished pipe units as described herein. If less than 100 units of a given size and class of pipe are required, the Contractor may submit certified copies of tests made on identical pipe units made by the same manufacturer within the past year. If more than 100 units of a given size and class of pipe are required, the Contractor shall, at his own expense, engage the services of an acceptable independent testing laboratory to perform or witness all tests, other than mill tests on reinforcing steel and cement, and certify the results. In addition, the Owner reserves the right to have any or all pipe units inspected or tested, or both, by an independent testing laboratory at either the manufacturer's plant or elsewhere. Such additional inspection and/or tests shall be at the Owner's expense and shall be the test results of record.
- C. All pipe units to be tested shall be selected at random by the Engineer. Unless otherwise permitted, all load-bearing tests on pipe units shall be made in the presence of the Engineer.
- D. All tests shall be made in accordance with the latest applicable ASTM specifications.
 - 1. Reinforcing Steel--Mill test reports, or reports on samples taken from each shipment to the pipe manufacturer, shall be submitted for reinforcing steel to be used on this project stating that the reinforcing meets the specified requirements.
 - 2. Cement--Mill test reports shall be submitted for each shipment to the pipe manufacturer of cement to be used on this project stating that the cement meets the specified requirements. All cement accepted for this project shall be kept segregated from other cement.
 - 3. Aggregates--Test reports shall be submitted stating that the aggregates to be used on this project meet the requirements for concrete aggregates as specified in ASTM C33. Additional tests and reports shall be made monthly thereafter during the production of the pipe.
 - 4. Absorption Tests--Three cores shall be taken from each pipe unit that is to be load tested. The cores shall be taken before the load-bearing tests are performed. All cores shall be tested for absorption by the boiling absorption test. Average absorption shall not exceed 8 percent of the dry weight and no single test shall exceed 9 percent.
 - 5. Pipe Unit Load-Bearing Tests--A load-bearing test shall be made on one pipe unit of each size and class and the report of the test submitted before delivery to the project of that size and class of pipe unit. An additional test will be required for each 200 units of each size and class of pipe. The load-bearing test shall be performed after the cores for the absorption tests have been taken. Each load-bearing test shall be carried to the specified load to produce the 0.01 in. crack. If the 0.01 in. crack is not formed, the pipe unit may be used in the project. Cored holes shall be plugged with the mortar specified above for repairs.
 - 6. Pressure Test--A pressure test shall be made on two pipe units of each size and class to be used. Each pipe unit shall be bulkheaded independently and then joined together in a normal manner with the joint to be used in the work. The pipe units shall be held in place in such manner that no external compression force is exerted on the joint during the test. The

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test pressure shall be an average internal hydrostatic pressure of 10 psi and shall be maintained for at least 10 minutes without visible leakage from the joint. A description of the bulk-heading and pipe holding arrangement shall be submitted to the Engineer for review prior to performing the test. All pressure tests shall be made in the presence of the Engineer.

7. Concrete Cylinders--Compression tests shall be made on standard concrete cylinders for the first or test pipe unit and then for every 100 cubic yards of concrete used in pipe manufacture, or for each additional 200 units of pipe, whichever represents the lesser amount of concrete. Four cylinder shall be made for each test and they shall be broken at 7, 14, and 28 days with one cylinder as a spare to be used in the event of an unsatisfactory break. The reports shall be submitted within three days after each of the compression tests.

PART 3 – EXECUTION

3.1 HANDLING PIPE

- A. Each pipe unit shall be handled into its position in the trench only in such manner and by such means as is acceptable to the Engineer.
- B. The Contractor will be required to furnish suitable devices to permit satisfactory support of all parts of the pipe unit when it is lifted.

3.2 INSTALLATION

- A. Each pipe unit shall be inspected before being installed. Any pipe discovered to be defective either before or after installation shall be removed and replaced with a sound pipe.
- B. Except as otherwise indicated on the drawings, the pipe shall be supported by compacted crushed stone. No pipe or fitting shall be permanently supported on saddles, blocking, or stones. Crushed stone for bedding shall be as specified under Section 02200.
- C. Suitable bell holes shall be provided, so that after placement only the barrel of the pipe receives bearing pressure from the supporting material.
- D. All pipe units shall be cleared of all debris, dirt, etc., before being installed and shall be kept clean until accepted in the completed work.
- E. Pipe and fittings shall be installed to the lines and grades indicated on the drawings or as required by the Engineer. Care shall be taken to ensure true alignments.
- F. Before any joint is made, the unit shall be checked to assure that a close joint with the next adjoining unit has been maintained and that the inverts are matched and conform to the required grade. The pipe shall not be given down to the required grade by striking it with a shovel handle, timber, or other unyielding object.
- G. All joint surfaces shall be cleaned. Immediately before jointing the pipe, the bell or groove shall be lubricated in accordance with the manufacturer's recommendation. Each pipe unit shall then be carefully pushed into place without damage to pipe or gasket. Suitable devices shall be used to force the pipe unit together so that they will fit with a minimum open recess inside and outside and have tightly seated joints. Care shall be taken not to use such force as to wedge apart and split the bell or groove ends. Joints shall not be pulled or cramped without the permission of the Engineer.

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- H. Immediately after the pipe joint is completed, the position of the gasket in the joint shall be inspected using a suitable feeler gage furnished by the Contractor, to be sure it is properly put together and is tight. Joints in which the gasket is damaged or not properly positioned shall be pulled apart and remade using a new gasket.
- I. Where any two pipe units do not fit each other closely enough to enable them to be properly jointed, they shall be removed and replaced with suitable units and new gaskets.
- J. Details of gasket installation and joint assembly shall follow the directions of the manufacturer of the joint materials and of the pipe, all subject to acceptance by the Engineer. The resulting joints shall be watertight and flexible.
- K. After each pipe to be supported on screened gravel has been properly bedded, enough gravel shall be placed between the pipe and the sides of the trench, and thoroughly compacted, to hold the pipe in correct alignment. Bell holes provided for jointing shall be filled with screened gravel and compacted, and then screened gravel shall be placed and compacted to complete the pipe bedding, as indicated on the drawings.
- L. The Contractor shall take all necessary precautions to prevent floatation of the pipe in the trench.
- M. At all times when pipe installation is not in progress, the open ends of the pipe shall be closed with temporary watertight plugs or by other suitable means. If water is in the trench when work is to be resumed, the plug shall not be removed until all conditions are suitable to prevent water, earth, or other material from entering the pipe.
- N. Pipelines shall not be used as conductors for trench drainage during construction.
- O. Backfill material shall be in accordance with Section 02200, Earthwork.

3.3 CLEANING

- A. Care shall be taken to prevent earth, water, and other materials from entering the pipeline. As soon as possible after the pipe and manholes are completed, the Contractor shall clean out pipelines and manholes, being careful to prevent soil, water, and debris from entering any existing pipe.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Requirements for supporting existing utilities which conflict with the proposed Work.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.3. SUBMITTALS

- A. In accordance with the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2 submit support of utilities plans indicating limits and details of the utility being impacted.

1.4 PROJECT/SITE CONDITIONS

A. Existing Conditions

1. The presence of utilities within the streets, roads, and right of ways customarily indicate that service lines connecting the buildings and structures are present along the route. Safeguard all utilities and their respective service connections from damage during the performance of the Work. Contractor is made aware that not all service connections have necessarily been shown on the Drawings. Services shown on the Drawings are based on best available information.
2. The presence of utility poles indicates that overhead wires for electric, telephone, and cable TV also exist. Protect all utility poles and overhead wires, including service lines, from damage caused by equipment used to perform the Work under this Contract.
3. Existing utilities as indicated on the Drawings are from the best available information. The completeness and accuracy of such is not guaranteed.

B. Support of Utilities

1. Support of existing utilities will be allowed when;
 - a. The location of the existing utility does not interfere with the excavation, excavation support, installation of piping, structures, or appurtenances.
 - b. Support in place will not be detrimental to the utility itself.
 - c. Support of utility is in accordance with the requirements of the utility in question.

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1.5 SCHEDULING

A. Coordination

1. Coordinate all existing utility relocation work with the appropriate utility company.
2. Notify "Dig Safe" in accordance with State of Rhode Island requirements.
3. Conduct test pits to identify utility locations needed to perform the Work only after coordination with the utility company and in time to prevent delay of the Work.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. As required by the utility company, as specified, or as approved by the Engineer. All materials used to perform support of existing or proposed utilities shall be new and unused.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. After test pit excavations are performed, submit as-built information to utility company and the Engineer.

3.2 INSTALLATION

- A. Work shall be performed in strict accordance with the requirements of the utility company or department responsible for the Work.

3.3 INSPECTION

- A. Allow access to the support work for inspections and recording of as-built information.

3.4 SUPPORT OF UTILITIES

- A. Contractor shall support existing utilities indicated to remain when required for the installation of proposed sewer piping, drain piping, catch basins and manholes. This includes, but is not limited to, water main that cross existing utilities, proposed drain that may cross proposed sewer and utility poles within the sidewalk.
- B. Contractors' method of support shall be to the satisfaction of Owner and Engineer.

END OF SECTION

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SECTION 02722

SANITARY SEWER SYSTEM

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 REFERENCES

- A. All work specified in this Section shall conform to “Standard Specifications for Road and Bridge Construction” of the Rhode Island Department of Transportation, latest revision, herein referred to as “State Standards” excluding the provisions of Part 100- General Requirements and Covenants and any reference to measurement and payment.
- B. All sanitary sewers and appurtenances shall be designed and constructed in accordance with TR-16, “Design and Construction of Sanitary and Storm Sewers” as prepared by the Technical Advisory Board of the New England Interstate Water Pollution Control Commission.
- C. All work shall conform to the following standards
 - 1. ASTM D 2412 External Loading Properties of Plastic Pipe by Parallel – Plate Loading
 - 2. ASTM D 2444 Impact Resistance of Thermoplastic Pipe and Fitting by means of TUP (Falling Weight)
 - 3. ASTM D 3034 Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings.
 - 4. ASTM D 3212 Joints for Sewer Pipes using Flexible Elastomeric Seals Federal Specification.
 - 5. SS-S-210 Sealing Compound, Preformed Plastic, for Expansion Joints and Pipe Joints.
 - 6. ASTM C 923 Standard Specification for resilient connectors between reinforced concrete manhole structures, pipes, and laterals. ASTM D-638, Tensile Properties
- D. All work shall be performed in accordance with the requirements of the Rhode Island Department of Environmental Management sanitary sewer requirements. Fines resulting from not conforming to the requirements shall be paid by the Contractor and at no additional expense to the Owner.

1.3 SUMMARY

- A. This Section specifies requirements in the Contract for the Contractor to furnish all plant, labor, equipment, appliances, and materials, and perform all operations in connection with the construction of sanitary sewerage systems at the locations and to the lines and grades indicated on the Contract Drawings and/or as directed. The work includes, but is not limited to, the following:
 - 1. Gravity sewer pipe, fittings, and appurtenances;
 - 2. Connections to other work including connections to manholes;
 - 3. Joining and jointing materials;
 - 4. All testing; and
 - 5. All other related and appurtenant work.

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- B. Related sections include the following:
 - 1. Section 02200, Earthwork
 - 2. Section 02601, Manholes and Catch Basins
 - 3. Section 02763- Pipeline Cleaning

1.4 DEFINITIONS

- A. PVC: Polyvinyl chloride plastic.

1.5 PERFORMANCE REQUIREMENTS

- A. Pipe used for gravity flow sanitary sewers shall be SDR-35 PVC unless specified otherwise on the Drawings.

1.6 QUALITY CONTROL

- A. Provide Quality Assurance/Quality Control in accordance with the requirements specified in Section 01400, Quality Control
- B. Pipe and Fittings Marking: Mark Pipe with the following information applied at intervals of not more than 5 feet.
 - Manufacturer's name or trademark;
 - Nominal pipe size;
 - PVC cell classification;
 - Applicable dimension ratio;
 - Date and location of manufacturer; and
 - Applicable standard designation number

1.7 SUBMITTALS

- A. Provide in accordance with the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2.
- B. Provide Shop Drawings for the following:
 - 1. Pipe: Include specifications on pipe materials, dimensions, fittings and joint details, construction details, tolerance and physical characteristics.
- C. Conformance Certificates: Each shipment of castings, pipe, pipe fittings, and appurtenances, shall be accompanied by the manufacturer's notarized certification and cylinder testing that materials meet specified requirements.
- D. Guarantee: The Contractor shall furnish a written guarantee signed by the manufacturer of the pipe and pipe fittings which he proposes to furnish, which shall warrant and guarantee that the pipe and pipe fittings meet all requirements of the specifications and that the pipe and fittings shall not fail or be injured as a result of conveying sewage, drainage, industrial wastes or groundwater.

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- E. Permits
 - 1. Provide Engineer and Owner's Representative with copy of all permits required prior to commencing work.
- F. Field quality-control test reports for field manhole and pipe testing.
- G. Record Drawings (see specification Section 02950, Site As-Built Site Survey).

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store pipe on flat surface which provides even support for the pipe barrel with bell ends overhanging. Do not stack pipe higher than 5 feet. Do not store pipe and fittings in direct sunlight.
- B. Protect pipe, pipe fittings, and seals from dirt and damage.
- C. Deliveries shall be scheduled so that the progress of the work is at no time delayed and so that large quantities of products shall not be stored for excessive lengths of time in crowded locations or in locations where large storage areas might be considered objectionable.
- D. Avoid damage to pipe from impact, bending, compression or abrasion during handling and storage.
- E. Ship rubber gaskets in cartons and store in a clean area away from grease, oil, ozone producing electric motors, heat and the direct rays of the sun.
- F. Use only nylon-protected slings to handle pipe. The use of hooks or bare cables will not be permitted.
- G. The Contractor shall dispose of pipe damaged during delivery, handling, or storage and replace at no cost to the Owner.
- H. Use all means necessary to protect precast concrete units and materials before, during, and after installation and to protect the installed work and materials for all other trades.
- I. The Contractor shall, at all times, be responsible for the safe handling and storage of all materials.
- J. Storage products will be restricted to approved or permitted areas. The Contractor shall arrange for the delivery of the products at locations approved by Owner's Representative and Engineer. To this end, he shall do such work as is necessary for access and for delivery of the products.
- K. All products shall be stored in an approved, orderly manner so that there will be a minimum of re-handling from the storage area to the final position in the trench and so that there is a minimum of obstruction and inconvenience to any kind of traffic.
- L. Contractor shall bring only the products he intends on installing to the work site in a given work day. Unused products shall be brought back to Contractors' storage area unless otherwise approved by Engineer.

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- M. Products shall not be stored on areas over the newly laid pipeline or other pipelines which might be damaged by the superimposed load. Products may not be strung out along the alignment of the project other than what Contractor intends on installing on that given day.
- N. Products may not be stored on private property unless permission to do so has been granted by the property owner.

1.9 PROJECT CONDITIONS

- A. **Interruption of Existing Sanitary Sewage Service:** The interruption of the existing sanitary line shall not be permitted. The Contractor shall maintain the existing flows as required in Section 02149, Maintain Existing Flows
- B. **Dig Safe:** All Contractors or Subcontractors performing drilling, boring, auguring, jetting, sheeting or pile installation, demolition, excavation or like work shall, prior to commencement of these activities, contact Dig Safe and non-member utility companies having responsibility for underground transmission systems for information relative to locations of existing underground utilities a minimum 72 hours prior to commencing excavation.
- C. **Protection of Water Lines**
 - 1. **Vertical Separations:** Whenever the sewers cross existing water mains or services to remain, or in locations where the sewer line is anticipated to cross a proposed water main or service, the vertical separation of the top of the sewer shall be at least 18 inches below the bottom of the water main.
 - 2. **Horizontal Separations:** If the proposed sewer line is to be constructed closer than 10 feet from a proposed water main or existing water main to remain, and where top of sewer is fewer than 18-inches beneath invert of water main, the sewer line shall be encased in concrete or thicker wall pipe, such as Class 52 double cement lined ductile iron pipe or DR-18 PVC, shall be utilized for a minimum of 10 feet on either side of this encroachment. This must be performed until the separation is greater than 10 feet. Appropriate manufactured fittings shall be employed to adapt the ductile iron pipe to the PVC pipe of the contract. Controlled density fill is an acceptable form of encasement.
 - 3. Should the water main in either situation (Horizontal or Vertical conflict) be at or below the sewer elevation, the waterline or the sewer must be relocated to achieve 10-foot horizontal separation or the waterline raised to achieve the required vertical separation.
 - 4. Ductile iron or DR-18 pipe used for sewer where in conflict with the required horizontal or vertical separations required above shall be subject to hydrostatic pressure testing in accordance with AWWA standards for water main. Refer to Specification 02704 for pressure testing requirements

1.10 PERMITS

- A. The Contractor shall obtain any permits required by the local authority prior to commencing with work affecting the sanitary sewer system. The Contractor shall be qualified to perform work in the City of Pawtucket.
- B. No work shall commence until the Contractor has acquired all required permits and receives authorization from the Owner.

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- C. All required permits shall be obtained by the Contractor at no additional expense to the Owner.

1.11 QUALITY ASSURANCE

- A. Provide Quality Assurance/Quality Control in accordance with the requirements specified in Section 01400- Quality Control.
- B. Pipe and Fittings Marking: Mark with the following information applied at intervals of not more than 5 feet:
1. Manufacturer's name or trademark.
 2. Nominal pipe size.
 3. Pipe classification.
 4. Applicable dimension ratio.
 5. Date and location of manufacturer.
 6. Applicable standard designation number.

PART 2 PRODUCTS

2.1 IDENTIFICATION

- A. Underground-Type Line Markers for Non-Metallic Pipelines: Manufacturer's standard permanent detection tape, bright-colored, continuous printed polyethylene tape with a metallic core for detection of non-metallic underground installations, intended for direct-burial service; not less than 6" wide x 4 mils. thick. Provide green detection tape with black printing reading "CAUTION SEWER LINE BURIED BELOW." as manufactured by Seton or approved equal.

2.2 POLYVINYL CHLORIDE GRAVITY SEWER PIPE

- A. PVC sewer pipe for gravity sewers and service connections shall conform to ASTM D 1784 and D-3034, Type PSM Poly (Vinyl Chloride) PVC Sewer Pipe and Fittings and shall be SDR 35 and shall meet the following specific requirements and exceptions:
1. Polymer compounding and classification shall be in accordance with ASTM Specification D-1784 (Class 12454-B).
 2. All pipes shall be thoroughly inspected by the Engineer upon delivery and the pipe that does not conform to the above requirements shall be removed immediately from the site of the work by the Contractor.
 3. Each length of pipe shall be marked with the nominal pipe size, manufacturer's name or trademark, the PVC cell classification 12454-B, pipe type ASTM Specification, and SDR number. All fittings shall be marked with the nominal pipe size, manufacturer's name or trademark, "PVC", pipe type ASTM Specification, and SDR number.
 4. Gravity sewer pipe shall be furnished in the longest laying length manufactured, approximately 20-feet. The length of the incoming and outgoing polyvinyl chloride pipe at manholes shall be 4'-0" minimum to the nearest joint. Shorter lengths of pipe shall be furnished as necessary to allow proper locations for wyes and manholes. In no case shall other than the specified joints be installed.

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5. Pipe and fittings shall be tested by the manufacturer at his expense for external loading properties and impact resistance and the results furnished to Engineer, all in accordance with ASTM D-2412 and D-2444. Retesting, if required, shall be at the Contractor's expense.
6. Pipe between any two (2) manholes shall be of the same material, class, color and manufacture.
7. The pipe and fittings shall be homogeneous throughout and free from visible cracks, holes, foreign inclusion or other injurious defects. The pipe shall be as uniform as commercially practical in color, capacity, density and other physical properties.
8. Joints shall be bell and spigot. The bell shall consist of an integral wall Section with a solid cross Section rubber ring gasket factory-assembled, securely locked in place to prevent displacement. Joints shall conform to ASTM Standard D 3212 and F477.
9. All fittings and accessories shall have dimensions as recommended by the manufacturer and have bell and/or spigot configurations compatible with that of the pipe. Fittings and accessories shall have integral wall Section with a solid cross Section rubber ring set in place to prevent dislocation.
10. Pipe shall pass impact resistance test in accordance with ASTM D 2444 and minimum pipe stiffness test at 5% deflection in accordance with ASTM D 2412.
11. The normal length of 12-inch size and smaller pipe shall be 12.5 feet and 15-inch size shall be no longer than 20 feet.
12. Pipe and fittings shall be manufactured in the United States of America and shall be accompanied by the manufacturer's certificate of compliance, in addition to meeting the performance tests specified hereinafter.
13. Prior to the installation, six specimen lengths each 6-inches long of each size pipe shall be furnished by the Contractor for impact resistance test and three specimen lengths each 6-inches long of each size pipe for pipe stiffness test. These tests are to be made in accordance with ASTM D 2444 and ASTM D 2412, respectively, at the expense of the Contractor. No pipe shall be accepted if the tests do not meet the test requirements.

2.3 MANHOLE STRUCTURES:

- A. Cast iron frame and grate, red clay brick and all other materials shall conform to Section 02601, Manholes and Catch Basins.

2.4 PIPE JOINTS

- A. Joints for the gravity sewer pipe shall be of the bell and spigot type (push-on) with elastomeric gasket seal conforming to ASTM Specification D-3212, "Joints for Drain and Sewer Plastic Pipe using Flexible Elastomeric Seals".
- B. All surfaces of the joint upon or against which the gasket may bear shall be smooth and free of cracks or fractures and imperfections that could adversely affect proper sealing of the joint.
- C. The necessary number of elastomeric gaskets shall be furnished with each length of pipe. The gaskets shall be of the proper size and shape for the joints of the pipe furnished
- D. For shorter than standard pipe lengths, field cuts shall be made with an approved mechanical saw. Ends shall be cut square and perpendicular to the pipe axis. Spigots shall have burrs removed and ends smoothly beveled by an approved mechanical beveler. The angle and depth of field bevels shall be comparable to factory pipe spigots.

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2.6 OTHER MATERIALS

- A. All other materials not specifically described but required for proper and complete installation of the pipe shall be selected by the Contractor, subject to the review and approval of the Engineer and Owner.

PART 3 EXECUTION

3.1 GENERAL

- A. At no time shall the installed sanitary sewer piping be used to convey stormwater from dewatering operations or runoff.
- B. Excavating, trenching, and backfilling are specified in Section 02200, Earthwork.
- C. All sanitary sewerage system products shall be subject to inspection and approval by Engineer and the City of Pawtucket at the place of manufacture and/or at the site after delivery. The products shall be subject to rejection at any time due to failure to conform to the specifications. Rejected products shall be removed from the site immediately. All products shall be carefully examined for defects, and if any are found to be broken or defective, prior to or after being placed, they shall be removed and replaced by the Contractor without any further compensation.
- D. Each product shall be handled into its position in the trench in such a manner and by such means as the manufacturer recommends as satisfactory, and these operations will be restricted to those considered safe for the workmen and such as to cause no injury to the product or any property.
- E. The Contractor will be required to furnish slings, straps and/or other devices to provide satisfactory support of the pipe when it is lifted. Transportation from delivery areas to the trench shall be restricted to operations, which can cause no injury to the product. The products shall not be dropped from trucks or into the trench.
- F. The Contractor shall have on the job site with each crew, all the proper tools to handle the products being installed. The use of hammer and chisel, or any other method, which results in rough edges, chips, and damages, shall be prohibited.

3.2 CONTROL OF ALIGNMENT AND GRADE

- A. General Locations and Arrangements: Drawing plans and details indicate general location and arrangement of underground sanitary sewerage piping. Location and arrangement of piping layout take design considerations into account. Install piping as indicated, to extent practical. Where specific installation is not indicated, follow piping manufacturer's written instructions.
- B. All lines, grades, measurements, layout staking and reference staking necessary for the proper location and satisfactory completion of the pipeline, appurtenances and other construction, shall be the responsibility of the Contractor.
- C. All stakes, references and batter boards including original, additional or replacement, which may be required for the construction operations, shall be furnished, set and properly referenced by the Contractor. The Contractor shall be solely and completely responsible for the accuracy of the line and grade of all features of the work. Any errors or apparent discrepancies found in previous surveys, plans, specifications or special provisions shall be called to the Engineer's attention by the Contractor for correction or interpretation prior to proceeding with the work.

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- D. Upon request of the Engineer, the Contractor shall furnish copies of all data used in setting and referencing all stakes and other layout markings used by the Contractor.
- E. All staking shall be performed by qualified surveying personnel, who are trained, experienced and skilled in construction layout and staking of the type required under the contract and who are acceptable to the Engineer. The personnel shall perform this staking under the direct supervision of a land surveyor registered with the State of Rhode Island.
- F. The Contractor shall use a laser beam to assist in setting the pipe and shall demonstrate satisfactory skill in its use. The use of string levels, hand levels, carpenters' levels or relatively crude devices for transferring grade or setting pipe will not be permitted.
- G. During construction, the Contractor shall provide the Engineer and the City of Pawtucket, upon request, all reasonable and necessary materials, opportunities and assistance for checking the control of the work, as established by the Contractor. The Contractor will be informed of the results of these checks, but Engineer and the City by so doing, in no way relieves the Contractor of his responsibility for the accuracy of the layout work. The Contractor shall, at his expense, correct or replace as required, any deficient layout and construction work, which may be the result of inaccuracies in his staking operations or of his failure to report inaccuracies found in work done by others. If, as a result of these inaccuracies, the Owner is required to make further studies, redesign, or both, all expenses incurred by the Owner due to such inaccuracies will be deducted from any monies due to the Contractor
- H. The Contractor's field survey notes shall be kept neat, orderly and in conformance with accepted practice. Copies of all field survey books and notes shall be made available to the Engineer or City upon request.
- I. The Contractor shall carefully preserve benchmarks, reference points and stakes, and in case of willful or careless destruction by his own men, he will be charged with the resulting expense and shall be responsible for any mistakes or delay that may be caused by their unnecessary loss or disturbance.

3.3 PIPING INSTALLATION

- A. Install piping beginning at low point, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings according to manufacturer's written instructions for using lubricants, cements, and other installation requirements.
- B. Laying pipe: All pipe shall be laid upon a trench bottom prepared as specified under Section 02200, Earthwork. Install gravity-flow, non-pressure, drainage piping according to the following requirements:
 - 1. All pipes shall be laid in accordance with the recommendations or specifications of the manufacturer insofar as they do not conflict with these specifications.
 - 2. Pipe and appurtenances shall be examined carefully for cracks or other defects.
 - 3. Pipe shall be laid to the lines and depths shown on the Drawings or approved by the Engineer and the work done with suitable tools and appliances. An even alignment of the pipes shall be maintained.
 - 4. The Contractor shall excavate around the bell portion of the pipe, so the pipe barrel bears on the prepared bed.
 - 5. Blocking is not permitted.

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6. All pipes shall be clean and free of dirt before laying and open ends shall be kept covered and free of dirt during construction.
 7. The work shall be conducted in such a manner that no loose excavation or other foreign material can enter the pipes.
 8. Each pipe shall be held firmly in position by carefully and thoroughly tamping backfill material around the barrel of the pipe.
 9. Where new pipes are to adjoin existing structures, extreme care shall be taken in coring into existing structure. Tight waterproof connections shall be made without interrupting service.
 10. Whenever it is necessary to cut pipe to fit into the pipeline, or to provide additional couplings or sleeves, this work shall be done, and the materials shall be provided by the Contractor. So far as practicable, cut pieces of pipe may be used. Saws shall be used to cut all pipe.
 11. Ends of completed pipes and branches shall be sealed with tight fitting stoppers, or approved equivalent.
 12. At manholes and catch basins, short lengths of pipe, not over 4 feet long, shall be used to connect into the structure, as shown on the Drawings.
- C. Clear interior of piping and manholes of dirt and superfluous material as work progresses. Maintain swab or drag in piping and pull past each joint as it is completed. Place plug in end of incomplete piping at end of day and when work stops. Where connections to existing lines or temporary lines previously used, clean pipe to manufactures recommendation prior to fusing.
- D. Where installing pipe below standing water table trench shall be dry and free of water and pipe bedding. Trenching below bottom of pipe can be replaced with 3/4" crushed stone.
- K. All trenches, when pipe laying is in progress, shall be kept dry and all pipes and fitting shall be laid accurately to the required lines and grades using laser beam techniques and shall be uniformly supported along their entire lengths. The bottom of the excavation shall be properly trimmed to permit making the joints. The pipe shall be bedded and backfilled in accordance with the details. Additionally, installation of the sanitary sewer below the water table may be expected and the installation of pumps, wells, or other work required to lower the water table to install sanitary sewer piping or structures shall be completed at no additional cost to the Owner.
- L. The bell and rubber ring must be clean with no foreign material that could interfere with the proper assembly of the pipe spigot.
- M. The pipe end must be clean. Wipe with a clean, dry cloth around the entire circumference from the end to one inch beyond the reference mark.
- N. Lubricate the spigot end of the pipe, using only the factory specified lubricant supplied. Be sure to cover the entire spigot end circumference. The coating should be the equivalent of a brush coat of enamel paint. It can be applied by hand, cloth, pad, sponge, or glove.
- O. Insert the spigot end into the bell so that it is in contact with the rubber ring. Keep the pipe lengths in proper alignment. Brace the bell while the spigot end is pushed in under the rubber ring, so that previously completed joints in the line will not be closed up. Push the spigot end in until the reference mark on the spigot end is flush with the end of the bell.

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- P. When the pipe laying is not in progress, the pipe shall be protected in such a way to prevent flotation. Any pipe, which has floated shall be removed from the trench and re-laid to the satisfaction of the Owner's Representative at the Contractor's expense.

3.4 PIPE JOINT CONSTRUCTION

- A. Join gravity-flow, non-pressure, drainage piping according to ASTM D 2321 and ASTM D 2751 for elastomeric-seal joints and manufacturer's recommendations.

3.5 FIELD QUALITY CONTROL

- A. Testing shall be completed in accordance with the City of Pawtucket Requirements. At a minimum, the testing procedures below shall be completed.
- B. Notify the Board of Health prior to work and conform to inspection schedule and requirements.
- C. Contract the Owner's Representative a minimum of 72 hours prior to testing. Provide results to Owner's Representative.
- D. Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches of backfill is in place, and again at completion of Project.
1. Defects requiring correction include the following:
 - a. Alignment: Less than full diameter of inside of pipe is visible between structures.
 - b. Deflection: To be determined by the Mandrel Test.
 - c. Crushed, broken, cracked, or otherwise damaged piping.
 - d. Infiltration: Water leakage into piping.
 - e. Exfiltration: Water leakage from or around piping.
 2. The Contractor shall repair any defects or corrections required by the Engineer.
 3. Replace defective piping using new materials and repeat inspections until defects are within allowances specified at no expense to the Owner.
 4. Re-inspect and repeat procedure until results are satisfactory at no expense to the Owner.
- E. Testing Manholes
1. All sanitary manholes affected by the work shall be vacuum tested prior to backfilling, including existing manholes to which new connections are made. A minimum waiting period of thirty days after installation is required for all testing.
 2. Install vacuum tester and inflate compression band to affect a seal between the vacuum base and the new manhole, connect vacuum pump to the outlet part with the valve open, draw a vacuum of 10 inches of mercury, (HG), and close the valve.
 3. The manhole shall pass the test if the vacuum remains at 10 inches of HG in a time greater than 60 seconds for a 48-inch diameter manhole, time greater than 75 seconds for 60-inch diameter manhole and time greater than 90 seconds for 72-inch diameter manhole.
 4. If the manhole fails the initial test, the Contractor shall make proper repairs or replace the manhole and re-test at no additional compensation.

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F. Testing Gravity Sewers

1. Low Pressure Air Test

- a. After completing the backfill of the pipeline, the Contractor shall, at his expense, conduct a line acceptance test. The test shall be performed according to stated procedures and in the presence of the Engineer. A minimum waiting period of thirty days after installation is required for all testing. The line shall be flushed and cleaned prior to testing.
- b. All pneumatic plugs shall be seal-tested before being used in the actual test installation. One (1) length of pipe shall be laid on the ground and sealed at both ends with the pneumatic plugs to be checked. Air shall be introduced into the plugs to 25 psig. The plugs shall hold against this pressure without bracing and without movement of the plugs out of the pipe.
- c. After a manhole-to-manhole reach of pipe has been backfilled and cleaned, and the pneumatic plugs are checked by the above procedure, the plugs shall be placed in the line at each manhole and inflated to 25 psig. Low-pressure air shall be introduced into this sealed line until the internal air pressure reaches 4 psig greater than the average backpressure of any groundwater that may be over the pipe. At least two minutes shall be allowed for the air pressure to stabilize.
- d. After the stabilization period (3.5 psig minimum pressure in the pipe), the air hose from the control panel to the air supply shall be disconnected. The portion of line being tested shall be termed "acceptable". If the time required in minutes for the pressure to decrease from 3.5 to 2.5 psig (greater than the average back pressure of any groundwater that may be over the pipe) shall not be less than 12 minutes.
- e. If the installation fails the air test, the Contractor shall, at his expense determine the source of leakage. He shall then repair or replace all defective materials and/or workmanship to Engineer's satisfaction and the pipeline shall be re-tested, all performed at no additional compensation to the Contractor.

2. Infiltration Test

- a. The infiltration test shall be conducted at such time as the ground water level is at a height of not less than one foot above the top of the pipe for the full length of the Section of sewer being tested.
- b. Each manhole-to-manhole reach shall be tested separately. At no time will the Contractor be allowed to test more than one manhole-to-manhole reach.
- c. The Contractor shall construct such weirs or other means of measurement as shall be required and shall do such pumping as shall be necessary to enable the tests to be made satisfactorily.
- d. The groundwater leakage into the pipes will be measured by the Owner or Engineer after a minimum of one hour and the infiltration rate shall not exceed 50 gallons per day per mile per inch-diameter.

G. Pipe Deflection

1. Pipe provided shall be so installed that there be a maximum deflection of 5 percent determined by the Mandrel Test. Such deflection shall be computed by multiplying the amount of deflection (nominal diameter of the pipe less minimum diameter when measured) by 100 and dividing by the nominal pipe diameter.

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2. The Contractor shall measure the amount of deflection by pulling a specially designed gauge assembly through the completed Section after 120 days of installation. The gauge assembly shall be in accordance with the recommendations of the pipe manufacturer and be acceptable to the Engineer.
3. Should the installed pipe fail to meet this requirement, the Contractor shall do all work to correct the problem as the Engineer may require without additional compensation.
4. Replace leaking piping using new materials and repeat testing until leakage is within allowances specified.
5. Leaks and loss in test pressure constitute defects that must be repaired. All repairs shall be at the expense of the Contractor.

3.6 RECORD DRAWINGS

- A. All installed underground utilities shall be designated on as-built drawings by the contractor of record and provided to the Owner and Engineer in AutoCAD electrical format prior to completion of the project. All as-built drawings, (underground and above ground) shall be dimensioned from permanent benchmarks such as existing buildings and include depths at various points throughout the extent of the work, and invert elevations at all structures.

3.7 CLOSING ABANDONED SANITARY SEWERAGE SYSTEMS:

- A. Abandoned Piping: Close open ends of abandoned underground piping indicated to remain in place. Include closures strong enough to withstand hydrostatic and earth pressures that may result after ends of abandoned piping have been closed. Use either procedure below:
 1. Plugging and capping of abandoned pipes shall conform to Section 02750- Abandonment of Existing Sewers and Drains.

3.8 CLEANING:

- A. Interior of piping and manholes shall be cleaned of dirt and superfluous material prior to acceptance of sanitary sewer.

END OF SECTION

CITY OF PAWTUCKET
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SECTION 02750

ABANDONMENT OF EXISTING SEWERS AND DRAINS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes

1. Requirements for abandoning existing sanitary sewers and storm drains, as indicated on the Drawings, and as specified.

B. Related Sections

1. Section 02149 – Maintaining Existing Flows

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.**

1.3. REFERENCES

- A. All work specified in this Section shall conform to “Standard Specifications for Road and Bridge Construction” of the Rhode Island Department of Transportation, latest revision, herein referred to as “State Standards,” excluding the provisions of Part 100- General Requirements and Covenants and any reference to measurement and payment.**

B. American Society for Testing and Materials (ASTM)

1. C32, Standard Specification of Sewer and Manhole Brick (Made from Clay or Shale), AASHTO Designation M91-42, Red Sewer Brick Only Grade SS.
2. C144, Standard Specification for Aggregate for Masonry Mortar.
2. C150, Standard Specification for Portland Cement.
3. C207, Standard Specification for Hydrated Lime for Masonry Purposes.

1.4 SUBMITTALS

A. Shop Drawings

1. In accordance with the General Condition Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2.

B. Samples

1. Provide representative samples of materials if requested by the Engineer.

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PART 2 – PRODUCTS

2.1 PLUGS

A. General

1. Plugs shall meet the following thickness requirements:

<u>Sewer/Drain Diameter</u>	<u>Thickness of Plug</u>	
	<u>Concrete</u>	<u>Brick & Mortar</u>
15-inch and less	12-inch	8-inch
15 to 30-inch	24-inch	16-inch
Greater than 30-inch	36-inch	24-inch

2. For non-circular pipes, the largest cross-sectional dimension shall govern in determining the size of the plug.
3. Bricks with more than one layer of thickness shall be interlocked.
4. Mechanical plugs will not be allowed.

B. Cement

1. Minimum 4,000 psi cement concrete materials or brick masonry.

C. Brick

1. Sound, hard, and uniformly burned brick, regular and uniform in shape and size, of compact texture, and satisfactory to the Engineer.
2. In accordance with ASTM C32, Red Sewer Brick Only Grade SS.
3. In accordance with AASHTO M91-42, Red Sewer Brick Only Grade SS.

D. Mortar for Brickwork

1. Composed of Portland cement, hydrated lime, and sand in which the volume of sand shall not exceed three times the sum of the volume of cement and lime.
2. The proportions of cement and lime shall be 1:1/2.
3. Cement shall be Type II Portland cement in accordance with ASTM C150.
4. Hydrated lime shall be Type S conforming to the ASTM C207.
5. Hydrated lime shall be "Mortaseal" or
6. "4X Hydrate" or
7. An acceptable equivalent product.
8. The sand shall conform to ASTM C144.

PART 3 – EXECUTION

3.1 INSTALLATION

A. Plugs

1. Plug existing sanitary sewers and storm drains, as indicated on the Drawings and as specified.
2. Plugs shall withstand the full soil and groundwater pressure.

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3. Pipe entering a manhole or catch basin, or an existing pipe cut in that is to be abandoned shall have a plug installed that is flush with the interior of the structure or pipe.
- B. Pipe Fill
1. Existing sanitary sewers and storm drains to be abandoned shall be abandoned and plugged, but not filled.

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes

1. Requirements for cleaning of sewer and drain pipelines.

B. Water for Construction

1. Drawing water from hydrants for cleaning of pipeline shall be coordinated with the Pawtucket Water Supply Board:
 - a. The installation of a reduced pressure double check backflow preventer and meter is required at the water source. It shall be the Contractor's responsibility to furnish and install meter and reduced pressure double check backflow preventer acceptable to Pawtucket Water. The Contractor shall pay Pawtucket Water directly for water usage at rates established by Providence Water. The Contractor shall include costs for water in the appropriate bid item.

C. Related Sections

1. Section 01570 - Traffic Regulation
2. Section 02149 - Maintaining Existing Flow
3. Section 02764 - Television Inspection
4. Section 02767 - Disposal of Materials

1.2 REFERENCES

A. National Association of Sewer Service Companies

1. NASSCO Recommended Specifications for Sewer Collection System Rehabilitation.

1.3 CLEANING AND DISPOSAL REQUIREMENTS

- A. The Contractor's attention is directed to the requirements set forth by the Rhode Island Department of Environmental Management (RIDEM) regarding "Special Wastes" and the proper disposal thereof. All waste materials and debris, as designated by the Owner and/or Engineer including but not limited to any pump station, sewers and associated structures, or any portions thereof, including but not limited to sludge, grit, sediment, dirt, sand, rock, grease, roots and other liquid, solid or slime-solid material contained therein, shall be considered, "Special Wastes".
- B. Remove dirt, grease, rocks, sand, iron tuberculation and other materials and obstructions from the pipeline.

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- C. Pipeline Cleaning shall be performed by hydraulically propelled or high velocity jet cleaning equipment. Selection of equipment shall be based on such field conditions as access availability and type of debris to be removed.
- D. Clean pipeline to restore a minimum of 95 percent of the original carrying capacity of the pipe, and suitably to permit CCTV inspection of the pipeline.
- E. The Contractor is required to test and dispose of any waste material removed from the pipeline in accordance with State and Federal requirements. Testing of waste material will be at the Contractor's expense.
- F. The Contractor shall notify the Engineer of the proposed disposal location and requirements of that disposal facility to allow disposal of waste material.
- G. The Contractor is required to store any waste material until all testing requirements of the proposed facility have been met and shall submit copies of all test results to the Engineer.
- H. The Contractor shall not be allowed to discharge waste or wastewater onto any road surface, sidewalk surface, or landscaped surface. Should any road or sidewalk surface become discolored from the contractor's cleaning operations, the contractor shall be required to power wash the affected area until the discoloration is removed.

1.4 SUBMITTALS

- A. Submit in accordance with the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2.
 - 1. Provide detailed plans and descriptions outlining cleaning and television inspection procedures and all provisions and precautions regarding the handling of existing sewage flows.

1.5 QUALITY ASSURANCE

- A. Submit in accordance with Section 01400, Quality Control
 - 1. Perform general work in accordance with NASSCO recommended specifications for sewer collection system rehabilitation.

1.6 QUALIFICATIONS

- A. Company specializing in performing the work of this section with minimum of three (3) years experience.

1.7 TRAFFIC CONTROL

- A. In accordance with Specification Section 01570, Traffic Regulation.

PART 2 – PRODUCTS (Not Used)

PART 3- EXECUTION

3.1 CLEANING PROCEDURES

A. Sewer and Drain Cleaning

1. The designated pipelines shall be cleaned using hydraulically propelled or high velocity jet cleaning equipment.
2. Selection of the equipment used shall be based on the conditions of the lines at the time the work commences.
3. Equipment and methods selected shall be satisfactory to the Engineer.
4. Equipment selected for cleaning shall be capable of removing dirt, grease, rocks, sand, iron tuberculation and other deleterious materials and obstruction from the pipelines.

B. Material Removal

1. Sludge, dirt, sand rocks, grease and other solid or semi-solid material resulting from the cleaning operation shall be removed at the downstream manhole of the section which could cause line stoppages.

C. Disposal of Materials

1. Solids or semi-solids resulting from the cleaning operations shall be removed from the site and disposed in accordance with Specification Section 02767, Television Inspections

D. Cleaning Precautions

1. During all pipeline cleaning operations, satisfactory precautions shall be taken to protect the pipelines from damage that might be inflicted by the improper use of cleaning equipment.
2. Whenever hydraulically propelled cleaning tools, which depend upon water pressure to provide their cleaning force or any tools which retard the flow of water in the pipeline are used, precautions shall be taken to ensure that the water pressure created does not cause any damage or flooding to public or private property.
3. The flow of sewage in the sewer lines shall be utilized to provide necessary pressures by hydraulic cleaning devices whenever possible.
4. When additional quantities of water from fire hydrants are necessary to avoid delay in normal working procedures, the water shall be conserved and not used unnecessarily.
5. No fire hydrant shall be obstructed in case of a fire in the area served by the hydrant, nor shall a hydrant be used for the purpose described unless a vacuum break is provided.

E. Root Removal:

1. Any visible roots shall be removed as required by the Engineer.
2. Roots shall be removed in all sections by mechanical methods.
3. Chemical root treatment shall also be used as approved by the Engineer.

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- a. Herbicide to be EPA approved.
- b. Herbicide must be integral part of chemical sealant material.
- c. Application to be done in accordance with manufacturers written instructions.
- d. Any surrounding vegetation damaged due to Contractor's operation shall be replaced at no expense to the Owner.

F. Pumping and flow bypassing

1. The Contractor may have to bypass sewage flow to allow performance of the work. The Contractor shall supply the necessary pumps, conduits and other equipment to divert the flow of sewage around the pipeline section in which work is to be performed.
2. Handling existing sewage flows and bypass pumping shall be in accordance with Specification Section 02149, Maintaining Existing Flows.

G. Flow Control Precautions

1. Whenever flows in a sewer line are blocked, plugged, or bypassed, sufficient precautions must be taken to protect the sewer lines from damage that might be inflicted by excessive sewer surcharging.
2. Further, precautions must be taken to ensure that sewer flow control operations do not cause flooding or damage to public or private property being served by the sewers involved.
3. Coordination with private property owners is required.

3.2 FIELD QUALITY CONTROL

- A. After cleaning, the sewer pipes shall be visually inspected by means of closed-circuit television. The inspection shall be recorded on DVD's and printed TV inspection logs in accordance with Specification Section 02764, Television Inspections.
- B. After videotaping the cleaned pipeline any pipe not sufficiently cleaned shall be cleaned again to obtain satisfactory results at no additional cost to the Owner.
- C. Provide two digital video disks (DVDs), one original and one copy to document conditions following completion of the cleaning process.

END OF SECTION

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SECTION 02764

TELEVISION INSPECTIONS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes

1. Requirements for closed-circuit television inspection (CCTV) of pipelines, including drainage and sewer, to be performed in completed sewer line following completion of construction.

B. Related Sections

1. Section 01570 - Traffic Regulations
2. Section 02149 - Maintaining Existing Sewage Flow
3. Section 02763 – Pipeline Cleaning

1.2 REFERENCES

A. National Association of Sewer Service Companies

1. NASSCO Recommended Specifications for Sewer Collection System Rehabilitation.

1.3 SUBMITTALS

- A.** In accordance with the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2, submit the following:

1. Outline of the procedures proposed to accomplish the work. Include a detailed description of the methods and equipment to be used for each operation. Outline CCTV inspection procedures and all provisions and precautions regarding the handling of existing sewage flows.

1.4 QUALITY ASSURANCE

- A.** Perform general work in accordance with NASSCO Recommended Specifications for Sewer Collection System Rehabilitation.

- B.** Utilize Pipeline Assessment and Certification Program (PACP) certified inspectors and PACP coding methods for all CCTV inspections.

1. Provide evidence of current PACP certification for all operators working on the project prior to commencement of the Work.

1.5 QUALIFICATIONS

- A.** Company specializing in performing the work of this section with minimum five (5) years documented experience.

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- B. Field Technicians must maintain current certifications for OSHA regulation, 29CFR1910 for Confined Space.

PART 2 - PRODUCTS

2.1 DELIVERABLES

A. CCTV Inspection Logs:

1. Printed location records clearly showing the location, in relation to an adjacent manhole of each infiltration point observed during inspection and other points of significance such as locations, unusual conditions, roots, storm sewer connections, broken pipe, presence of scale and corrosion, deposits, areas which exhibit loss of capacity, or other defects and other discernible features.
2. Logs shall be software generated, complete with the following information:
 - a. Upstream and downstream manhole identification numbers.
 - b. Address location.
 - c. Technicians name.
 - d. Inspection date/time and weather conditions.
 - e. Use of pipe (sanitary, storm, combined).
 - f. Type, shape, dimensions and material of pipe.

B. Recordings:

1. Color video and audio record documenting CCTV inspection of conditions subsequent to cleaning.
2. The purpose of recording shall be to supply a visual and audio record confirming proper installation of new sewer and identification of problem areas of the lines that may be replayed.
3. Video recording playback shall be at the same speed that it was recorded. Slow motion or stop-motion playback features shall also be supplied.
4. Title to the recording shall remain with the Contractor; however, the Owner reserves the right to purchase any additional copies at the completion of the project.
5. Provide three (3) electronic copies complete in the required format for distribution to Owner, Engineer, and Narragansett Bay Commission.

C. Current PACP compliant software for documenting the inspection is to be used.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Control traffic in accordance with Specification Section 01570.
- B. The Contractor may have to bypass sewage flow to allow performance of work. Handling existing sewage flows and bypass pumping shall be as specified in Specification Section 02149, Maintaining Existing Flows

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C. Clean all new and existing sewer lines in accordance with Specification Section 02763.

3.2 CCTV INSPECTION

A. Following installation and cleaning of new sewer and drainpipes, perform a CCTV inspection on all new sewer and drainpipes. All CCTV work shall conform to current NASSCO-PACP standards.

B. Sewer and drain sections shall be inspected by means of remote CCTV. If a blockage hampers the inspection of the sewer in one direction, then the Contractor shall attempt to complete the section by televising from the other manhole to complete the section. The Contractor must immediately report the obstruction to the Owner or his representative (hereinafter referred to as "Owner").

C. CCTV inspections will be delivered entirely in electronic format:

1. All PACP Header information shall be completed in accordance with PACP Guidelines. In addition to mandatory Header fields, additional fields are required as noted on the attached Header Field Matrix.
2. The documentation of the work shall consist of PACP CCTV Reports, PACP database, logs, electronic reports, etc. noting important features encountered during the inspection. The speed of travel shall be slow enough to inspect each pipe joint, tee connection, structural deterioration, infiltration and inflow sources, and deposits, but should not, at any time, be faster than 30 feet per minute, except as noted otherwise in this document.
3. The camera must be centered in the pipe to provide accurate distance measurements to provide locations of features in the sewer and these footage measurements shall be displayed and documented on the video. All PACP Observations shall be identified by audio and on PACP log. All video must be continuously metered from manhole. The pipe should be clean enough to ensure all defects, features and observations are seen and logged. If cleaning is required, see NASSCO Performance Specification Guideline for Sewer Pipe Cleaning.

D. Equipment:

1. The Contractor shall use a color pan and tilt camera or a side wall scanning (panoramic) camera specifically designed and constructed for sewer inspection. Each sewer to be televised shall be suitably isolated to control flow during the inspection. The Contractor shall provide a recording of the televised sewer inspection, locating each sewer service connection entering the sewer.
2. Lighting for the pan and tilt camera or side wall scanning camera shall provide a clear picture of the entire periphery of the existing sewer.
3. The pan and tilt camera shall pause, pan, and visually inspect all, pipe ends, and maintenance or structural defects. If utilizing a camera with side wall scanning capabilities, pausing and panning of each lateral is not necessary during the inspection if the image clearly depicts the inside of the lateral for post processing. If a blockage cannot be removed and hampers the televising of the sewer in one direction then the Contractor shall attempt to complete the section by televising from the other manhole to complete the section, this reversal should immediately

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follow the initial direction. The Contractor must immediately report the obstruction to the Owner.

4. Side wall scanning inspection systems are imaging cameras that are capable of a continuous 360-degree image capture of the wall of the pipeline being inspected. These systems may have one or multiple cameras to capture the complete interior view of the pipeline. Due to the high resolution of the image quality, the inspections may be conducted at a higher speed than color pan and tilt CCTV method. Once the pipeline inspections are completed, the captured images can be linked with a companion software package that allows for identifying and coding defects and features in the pipeline. Typically, these systems provide a fold flat view and a perspective view (typical of CCTV) of the pipeline.
5. If the image quality is not adequate for post-inspection coding, the Contractor shall be required to repeat the survey at the Contractor's expense.
6. The Contractor shall perform all CCTV inspections in accordance with NASSCO's Pipeline Assessment Certification Program (PACP). CCTV inspections will be delivered entirely in electronic format. The entire survey shall be recorded in an approved electronic format submitted with electronic links between the data and the video. All television inspection reports shall be within +/- two (2) feet of the measured linear footage between manholes along the existing sewer centerline from the start of pipe to end of pipe. All Owner and PACP-required header information must be fully and accurately entered on all CCTV reports. Work not following these specifications may be rejected for payment and the Contractor may be required to redo the work.
7. The Contractor shall provide a PACP certified operator on site at all times during the entire survey. If video is to be coded separately from the actual recording, both the onsite Operator and the individual performing the PACP coding shall be PACP certified. The Contractor shall provide proof of certification prior to commencement of work, prior to a change in personnel involved in data collection, and as requested by the Owner.
8. CCTV Reports, logs, electronic reports, and worksheets must include the following information and conform to the applicable guidelines:
 - a. CCTV Reports, NASSCO PACP Certified Database, and electronic worksheets must accompany all inspection work.
 - b. All Owner and NASSCO PACP-required header information must be fully and accurately entered on all CCTV reports.

3.3 FIELD QUALITY CONTROL

A. CCTV Inspection Records

1. Complete records shall be kept of CCTV inspection performed in each manhole or catch basin section. The records shall identify the following information:
 - a. Identification of the manhole section tested.
 - b. Location (footage) of problem.
 - c. Defect classifications shall be PACP compliant.

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2. Record on all footage inside the sewer and drainpipe. All recordings and necessary playback equipment shall be readily accessible for review by the Engineer during the project.
3. CCTV inspection logs shall include the numbering or identification system utilized on the Contract Drawings or the Owner's data base in the event Drawings are not provided.

END OF SECTION

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SECTION 02767

DISPOSAL OF MATERIALS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Requirements for disposal of materials resulting from the cleaning and/or demolishing of sewer pipes and appurtenances.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.3 SUBMITTALS

- A. In accordance with the General Condition Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2, submit the following:
 - 1. Outline of the procedures proposed to accomplish the work.
 - 2. Include a detailed description of disposal methods and locations of disposal.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION

3.1 DISPOSAL PROCEDURES

- A. Material encountered in the cleaning and/or demolishing of sewer lines is considered “Special Waste” by the Rhode Island Department of Environmental Management (RIDEM). The materials include sludge, sand, grit, debris, sewer pipe and manholes, etc.
- B. The Contractor is required to test and dispose of any special waste material removed from within the project area in accordance with State and Federal requirements. Testing of waste material will be at the Contractor’s expense.
- C. The materials being removed from the pipelines and manholes during the cleaning process and sewers and manholes demolished shall be deposited in such a manner as to not endanger the public, plant personnel or persons performing the work. Such debris may be of such nature, high in biological organic contents, or chemically aggressive that they will require proper disposal in a safe, health risk free, environment. The Contractor shall contact the Owner and Engineer and all agencies having jurisdiction thereof, for approval of debris disposal methods and locations of disposal, prior to disposing of any material associated with the sewers. All materials generated from the cleaning or demolition of sewers shall be removed and satisfactorily disposed of off-site at an approved disposal facility.

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- D. Debris must be transported in a watertight vehicle. The Contractor must ensure that no water leaks from the vehicle in any manner during the transportation. The Contractor is solely responsible for any cleanup of debris on route to disposal at a licensed disposal facility. The Contractor is also responsible for the payment of any fines that are incurred as a result of any incident which occurs during the transportation and/or disposal of the contents of the vehicle.
- E. Disposal must be at a licensed facility that is regulated to accept and properly dispose of the debris that is normally expected to be in a wastewater collection system.

END OF SECTION

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SECTION 02900

LANDSCAPING

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Work under this section includes furnishing of topsoil and its preparation for seeding areas disturbed by the construction operations.

1.2 REFERENCES

- A. All work specified in this Section shall conform to “Standard Specifications for Road and Bridge Construction” of the Rhode Island Department of Transportation, latest revision, herein referred to as “State Standards.” excluding the provisions of Part 100- General Requirements and Covenants and any reference to measurement and payment.

1.3 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.4 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02200 – Earthwork
- B. Section 02530 – Restoration of Curb, Sidewalks, and Vegetated Areas

1.5 QUALITY ASSURANCE

- A. Subcontract seeding work to a firm specializing in such work unless Contractor is fully experienced and qualified.
- B. Each seed bag or container shall display a label which identifies the contents as a true representation of the seed mix and percentages required by specification. No seed shall be applied to a site until the Owner's representative has determined the mixture meets all requirements.
- C. Do not make substitutions without written approval. If specified seed mixes are not available, obtain approval for substitution from the Owner's representative.

1.6 SUBMITTALS

- A. Include analysis of proposed seed products. Submit certification that grass seed has been tested by a recognized laboratory for seed testing within 6 months prior to delivery. Do not use seed that has become wet or moldy. Submittals shall be made in accordance with the General Conditions Sections 3.10, 3.10.1, 3.10.2, 3.11, 3.12, 3.12.4, 3.12.5, 4.2, 4.2.4, 4.2.7, 5.2, 5.2.1, 5.2.3, 6.1.3, 7.3.7, 9.2, 9.3, 9.8, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, and 11.4.2.
- B. Blue Tag Certifications labels of proposed seed mixtures stating common and scientific names of grasses, percentages by weight, and percentages of purity and germination.

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1.7 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Protect all products from weather or other damage or deteriorating conditions
- B. Seed mixes which have been damaged or have deteriorated in transit or storage are not acceptable.
- C. Correlate with specified maintenance periods to provide maintenance to date of acceptance. Once the schedule is accepted, dates shall be revised and submitted in writing for reasons of delay.

1.8 WARRANTY

- A. Warranty seeding until final acceptance of grass stand.

1.9 MAINTENANCE

- A. Maintenance of seeding to be performed by the installer to ensure plant survival (95%) and to
 - 1. Watering.
 - 2. Regrading and replanting eroded areas; and
 - 3. Seeding or patching sparse or bare areas.
 - 4. Debris removal
 - 5. Replacement of damaged or dead material
- B. Maintain seeded areas immediately after placement until grass is accepted.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Topsoil: Loose friable loam, free of stumps, roots, rocks, brush, weeds, subsoil, refuse or other material detrimental to proper development of vegetative growth. Topsoil shall be in accordance with Section M.18.01 of the State Standards.
- B. Water: Clean, fresh, potable water.
- C. Commercial Fertilizer: Commercial product manufactured for seeded or sodded areas, containing nitrogen derived from natural sources and 10% by weight in available form with 6% phosphoric acid and 4% potash. Commercial fertilizer shall be in accordance with Section M.18.06.1 of the State Standards.
- D. Lime: Ground limestone to existing State and Federal regulations containing minimum 50% total oxides (calcium and magnesium oxides). Between forty and sixty percent shall pass a 100-mesh sieve and 100% shall pass a 20-mesh sieve, in accordance with Section M.18.05 of the State Standards.
- E. Seed Mix: Quality seed, free of noxious seed such as Russian or Canadian Thistle, European Bindweed, Johnson Grass or Leafy Spurge. Indicate supplier, lot number, net weight, percent weed seed content, and guaranteed percent purity and germination as follows:

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<u>Seed Type</u>	<u>Proportion by Weight</u>
Bar Fa 7676 (RTF)	39.5%
Barvado Tall Fescue	30%
Barlexas II Tall Fescue	20%
Barvette Kentucky Bluegrass (HGT)	7%
Barrister Kentucky Bluegrass	1%
Barimpala Kentucky Bluegrass	1%
Jump Start Kentucky Bluegrass	1%

Sowing Rate: 8 pounds per 1,000 sq. ft.

Overseed Sowing Rate: 5 pounds per 1,000 sq. ft.

PART 3 - EXECUTION

3.1 GRASS SEEDING

- A. General – Plant seed between the periods of March 15th to June 15th and/or August 15th to October 15th. Re-seed all newly filled or disturbed areas.
- B. Topsoil - place and spread to a compacted thickness of not less than 6 inches where areas are filled or disturbed as a result of the construction operations. Key to underlying sub-grade by means of harrows, rollers or other suitable and approved equipment. Do not begin placement until areas have been properly graded and prepared.
 - 1. Apply water as required, and in a manner that will prevent washing and eroding.
- C. Soil Preparation - remove all ground surface irregularities to eliminate low areas where ponding of water will occur.
 - 1. Immediately prior to seeding, lightly till soil into an even and loose seedbed at the specified or directed line and grade.
- D. Fertilizing - till lime into the upper 3-inch layer of loam at the rate of 46 pounds per 1,000 square feet of area to be seeded. Repeat procedure for application of fertilizer at the rate of 21 pounds of 10-6-4 commercial fertilizers per 1,000 square feet. Remove sticks, stones and debris from the areas and dispose of as directed.
- E. Seeding - apply seed with mechanical landscape drill so that seed will have about 1/4" cover. Do not drill seed in windy weather or when ground is frozen. Use broadcast or hydraulic seeding methods only in areas inaccessible to machine methods; or use

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hydraulic equipment capable of pumping 100 gallons per minute at 100 pounds per square inch. Provide means for estimating volume used or remaining in storage tank.

1. Water and maintain seeded areas for periods of 5 weeks following seeding including mowing. Avoid standing water, surface wash or scour. Protect seeded areas from vehicle and pedestrian traffic by use of barriers and signs.
2. Reseed areas where a satisfactory stand of grass, which has no bare spots larger than 72 square inches covering a maximum of 2 percent of the entire grassed area, has not been produced in a 5-week period. Repeat seeding until accepted.

3.2 ACCEPTANCE OF SEEDING

A. Provisional Acceptance: Provisional acceptance period shall be defined as the elapsed time between application of seed and the establishment of a good, healthy uniform growth of grass.

1. Provisional acceptance will not occur until the seeded areas are well established, exhibiting a vigorous growing condition, devoid of bare spots greater than 1 square foot.
2. Well established means at a minimum there is 80% coverage of the seeded surface free from weeds and invasives.
3. It will be the contractor's responsibility to maintain seeding areas in an approved condition until provisional acceptance.
4. The Contractor shall keep all seeded areas watered and in good condition, reseeding if and when necessary, during the provisional acceptance period.
5. Watering of seeded areas.
 - a. During this period, water grass to maintain an adequate supply of moisture within the root zone. An adequate supply of moisture is the equivalent of one (1") of absorbed water per week that is delivered at weekly intervals in the form of natural rain or is augmented by periodic watering.
6. It shall be the contractor's responsibility to obtain necessary documentation to show that provisional acceptance has been granted. This shall be done upon written request submitted by the contractor the landscape architect to inspect grass work on site. Provisional acceptance will not be granted until contractor has obtained, in writing, a statement from the landscape architect indicating that grass is satisfactory under the terms of the provisional acceptance

B. Final Acceptance: Final acceptance period shall be defined as the elapsed time between provisional acceptance and final closeout of the project.

1. All seeded areas shall be guaranteed and maintained by the Contractor for not less than one growing season from the time of provisional acceptance and shall include a minimum of three mowing's. Growing season shall be defined as follows:
 - a) If provisional acceptance is received during April, May, June or July, next growing season shall end on October 15.
 - b) If provisional acceptance is received during September, October,
 - c) Final acceptance will not be granted until 95% percent coverage of the seeded surface is established with the proposed seed mix free from noxious weeds.

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2. At the end of the guarantee period, inspection will be made by the Owner's Representative upon written request submitted by the Contractor at least ten (10) days before the anticipated date. Grass areas not demonstrating satisfactory stands as outlined above, except if damaged by vandalism, shall be renovated, re-seeded, and maintained meeting all requirements as specified herein.
3. After all necessary corrective work has been completed, the Owner's representative shall certify in writing the final acceptance of the grass area.
4. Decision of Owner as to the necessity to replace grass areas or repair any defects on workmanship, or cause of any destruction or loss, impairment or failure to flourish, shall be conclusive and binding upon Contractor. Replacements shall be the same as specified. All replacements shall be planted as specified herein at Contractor's expense.
5. "Vandalism", as noted above, is intended to mean any acts, whether intentional or accidental, by other persons, which clearly result in damage, and which may reasonably be considered to be beyond the Contractor's reasonable control.

END OF SECTION

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SECTION 02950

AS-BUILT SITE SURVEY

PART 1 - GENERAL

1.1 CONDITIONS AND REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Examine all drawings and all other Sections of the specifications for requirements therein affecting the work of this trade.
- C. Coordinate work with that of all other trades affecting or affected by work of this Section. Cooperate with such trades to assure the steady progress of all work under the Contract.

1.2 DESCRIPTION OF WORK

- A. The work in this Section consists of providing corrected as-built construction documents which reflect the actual as-built site conditions. Corrected documents shall include any adjustments to:
 - 1. The actual layout and outline of all pavements, sidewalk, curbing, surfaces and visible site improvements including plantings.
 - 2. Site topography at 2-foot contour intervals for all disturbed areas. Spot grades shall be provided on all pavements, sidewalks and ADA access ramps. Spot grades shall be provided at intervals not in excess of 20 feet and at all observable breaks or changes in grade.
 - 3. Installed location and elevations (rims, inlet and outlet inverts, sumps, pipe tap-in inverts) of all site utilities including:
 - a. Storm drainage system including drainage pipes, catch basins and manholes.
 - b. Sewer system including all sanitary and special waste sewer pipes, manholes, and all other sanitary components.

1.3 RELATED WORK

- A. Section 02200, Earthwork
- B. Section 02601, Manholes and Catch Basins
- C. Section 02614, Reinforced Concrete Drain Pipe
- D. Section 02722, Sanitary Sewerage System

PART 2 - MATERIALS AND EXECUTION

2.1 CORRECTED AS-BUILT DOCUMENTS

- A. At the completion of correcting all as-built construction documents, the contractor shall submit to the Engineer for review, two prints of all as-built documentation and an electronic copy as specified.

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PROSPECT HEIGHTS SEWER RECONSTRUCTION**

- B. All field books, computer files, data collector files and computations required for the above-described work shall be kept in a neat and orderly manner, clearly indexed, and shall be available for inspection and reference at least three years after the completion of the project.
- C. The responsible person preparing the as-built documentation shall be a Registered Land Surveyor licensed to practice in the State of Rhode Island. All drawings shall be signed and sealed by the Rhode Island Registered Land Surveyor who is responsible for the as-built documentation.

END OF SECTION

Appendix G

Federal Provisions



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

KIRSTEN
ANDERER
Digitally signed by KIRSTEN
ANDERER
Date: 2020.12.11 07:55:52
-05'00'

MICHAEL DEANE
Digitally signed by MICHAEL
DEANE
Date: 2020.12.11 17:56:38 -05'00'

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.

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>.

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

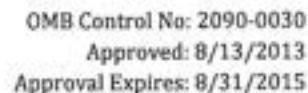
An EPA Financial Assistance Agreement Recipient must require its prime contractors to provide this form to its DBE subcontractors. This form gives a DBE¹ subcontractor² the opportunity to describe work received and/or report any concerns regarding the EPA-funded project (e.g., in areas such as termination 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.



Please use the space below to report any concerns regarding the above EPA-funded project:

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper appears to be a standard notebook page.

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 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.

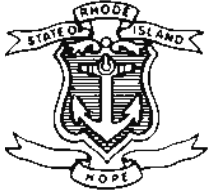
² Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

**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.



Rhode Island Department of Environmental Management Office of Water Resources

Clean Water State Revolving Fund Program Contract Specifications Package

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))
- 5) Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects (Executive Order 13202)

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 <http://www.epa.gov/owm/cwfinance/cwsrf/enhance/DocFiles/Other%20Docs/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 RIDEM as a service of the CWSRF 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, 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, 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.
- (2) 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, or national origin.
- (3) 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.
- (4) 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.
- (5) 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.
- (6) 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.
- (7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) 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 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 nonsegregated 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
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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.

EXECUTIVE ORDER

PRESERVATION OF OPEN COMPETITION AND GOVERNMENT NEUTRALITY TOWARDS GOVERNMENT CONTRACTORS' LABOR RELATIONS ON FEDERAL AND FEDERALLY FUNDED CONSTRUCTION PROJECTS

By the authority vested in me as President by the Constitution and laws of the United States of America, including the Federal Property and Administrative Services Act, 40 U.S.C. 471 et seq., and in order to (1) promote and ensure open competition on Federal and federally funded or assisted construction projects; (2) maintain Government neutrality towards Government contractors' labor relations on Federal and federally funded or assisted construction projects; (3) reduce construction costs to the Federal Government and to the taxpayers; (4) expand job opportunities, especially for small and disadvantaged businesses; and (5) prevent discrimination against Government contractors or their employees based upon labor affiliation or lack thereof; thereby promoting the economical, nondiscriminatory, and efficient administration and completion of Federal and federally funded or assisted construction projects, it is hereby ordered that:

Section 1. To the extent permitted by law, any executive agency awarding any construction contract after the date of this order, or obligating funds pursuant to such a contract, shall ensure that neither the awarding Government authority nor any construction manager acting on behalf of the Government shall, in its bid specifications, project agreements, or other controlling documents:

(a) Require or prohibit bidders, offerors, contractors, or subcontractors to enter into or adhere to agreements with one or more labor organizations, on the same or other related construction project(s); or

(b) Otherwise discriminate against bidders, offerors, contractors, or subcontractors for becoming or refusing to become or remain signatories or otherwise to adhere to agreements with one or more labor organizations, on the same or other related construction project(s).

(c) Nothing in this section shall prohibit contractors or subcontractors from voluntarily entering into agreements described in subsection (a).

Sec. 2. Contracts awarded before the date of this order, and subcontracts awarded pursuant to such contracts, whenever awarded, shall not be governed by this order.

Sec. 3. To the extent permitted by law, any executive agency issuing grants, providing financial assistance, or entering into cooperative agreements for construction projects, shall ensure that neither the bid specifications, project agreements, nor other controlling documents for construction contracts awarded after the date of this order by recipients of grants or financial assistance or by parties to cooperative agreements, nor those of any construction manager acting on their behalf, shall contain any of the requirements or prohibitions set forth in section 1(a) or (b) of this order.

Sec. 4. In the event that an awarding authority, a recipient of grants or financial assistance, a party to a cooperative agreement, or a construction manager acting on behalf of the foregoing, performs in a manner contrary to the provisions of sections 1 or 3 of this order, the executive agency awarding the contract, grant, or assistance shall take such action, consistent with law and regulation, as the agency determines may be appropriate.

Sec. 5. (a) The head of an executive agency may exempt a particular project, contract, subcontract, grant, or cooperative agreement from the requirements of any or all of the provisions of sections 1 and 3 of this order, if the agency head finds that special circumstances require an exemption in order to avert an imminent threat to public health or safety or to serve the national security.

(b) A finding of "special circumstances" under section 5(a) may not be based on the possibility or presence of a labor dispute concerning the use of contractors or subcontractors who are nonsignatories to, or otherwise do not adhere to, agreements with one or more labor organizations, or concerning employees on the project who are not members of or affiliated with a labor organization.

Sec. 6. (a) The term "construction contract" as used in this order means any contract for the construction, rehabilitation, alteration, conversion, extension, or repair of buildings, highways, or other improvements to real property.

(b) The term "executive agency" as used in this order shall have the same meaning it has in 5 U.S.C. 105, excluding the General Accounting Office.

(c) The term "labor organization" as used in this order shall have the same meaning it has in 42 U.S.C. 2000e(d).

Sec. 7. With respect to Federal contracts, within 60 days of the issuance of this order, the Federal Acquisition Regulatory Council shall take whatever action is required to amend the Federal Acquisition Regulation in order to implement the provisions of this order.

Sec. 8. As it relates to project agreements, Executive Order 12836 of February 1, 1993, which, among other things, revoked Executive Order 12818 of October 23, 1992, is revoked.

Sec. 9. The Presidential Memorandum of June 5, 1997, entitled "Use of Project Labor Agreements for Federal Construction Projects" (the "Memorandum"), is also revoked.

Sec. 10. The heads of executive departments and agencies shall revoke expeditiously any orders, rules, regulations, guidelines, or policies implementing or enforcing the Memorandum or Executive Order 12836 of February 1, 1993, as it relates to project agreements, to the extent consistent with law.

Sec. 11. This order is intended only to improve the internal management of the executive branch and is not intended to, nor does it, create any right to administrative or judicial review, or any right, whether substantive or procedural, enforce-able by any party against the United States, its agencies or instrumentalities, its officers or employees, or any other person.

GEORGE W. BUSH

THE WHITE HOUSE, February 17, 2001.

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 copartnership, 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 § 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 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.

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.

(a) 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 higher education assistance authority, 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 for not less than ten (10) nor more than ninety (90) days, 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 upon the project to the director of labor and training on a monthly basis for the preceding month's work.

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

(c) Any 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 five hundred dollars (\$ 500) for each calendar day of noncompliance as determined by the director of labor and training. Any of those revenues shall be deposited as general revenues. Any person, firm, or corporation found to have willfully made a false or fraudulent representation in connection with reporting their 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 one thousand dollars (\$ 1,000) and not greater than three thousand dollars (\$ 3,000) per representation. 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.

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 - Hearings.

(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 percentum (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. The false or fraudulent representation 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). 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

(Appropriate wage rate to be inserted by bidder in specifications)

For a copy of the appropriate wage rate, contact:

**R.I. Department of Labor
Division of Labor Standards
610 Manton Avenue
Providence, RI 02909**

TITLE 37

CHAPTER 14.1 MINORITY BUSINESS ENTERPRISE

Sections

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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 and services and 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.

**REGULATIONS GOVERNING PARTICIPATION BY MINORITY BUSINESS ENTERPRISES IN STATE
FUNDED AND DIRECTED PUBLIC CONSTRUCTION PROJECTS, CONSTRUCTION CONTRACTS
AND PROCUREMENT CONTRACTS FOR GOODS AND SERVICES**

I. GENERAL

1. Purpose

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

(b) These regulations implement, in part, R. I. Gen. Laws, Chapter 37-14.1. These regulations are effective immediately and supersede all Department of Administration regulations issued previously under these authorities insofar as such regulations affect minority business enterprise matters in the State.

2. Applicability

These regulations apply to any construction project, construction contract or procurement contract for goods and services funded in whole or in part by state funds, or funds which, in accordance with federal grant or otherwise, the state expends or administers or in which the state is a signatory. Quasi-independent state agencies, such as the Rhode Island Public Buildings Authority, the Narragansett Bay Commission and the Rhode Island Port Authority, are subject to the requirements outlined under these regulations. With respect to Department of Transportation contracts, The Director of Transportation may promulgate regulations consistent with R. I. Gen. Laws Sections 37-14.1-8 and 37-14.1-9, thereby exempting Department of Transportation contracts from the requirements of these regulations.

3. Definition

The terms "building" or "work" means construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvement of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways lighthouses, buoys, jetties, breakwaters, levees, and canals; dredging, shoring, scaffolding, drilling, blasting, excavating, clearing and landscaping. Unless conducted in connection with and at the site of such a building or work as described in the foregoing sentence, the manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not a "building" or "work" within the meaning of these regulations.

"Compliance" means the conditions existing when a prime contractor has met and implemented the requirements of these regulations.

"Construction" means all types of on-site work done on a particular building or work, including, without limitation, altering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.

"Construction Project" means a contract or group of contracts for construction work that a prime contractor has agreed to perform, whether directly or through the use of subcontractors.

"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 these regulations, a lease is a contract.

"Contractor" means one who participates, through a contract or subcontract, in any program covered by these regulations and includes lessees.

"Director" means the Director of the Department of Administration or any person whom he/she has designated to act for him/her.

"Goods" means materials or supplies of any kind provided by a vendor, his agents or employees.

"Services" means professional or non-professional activities requiring mental or physical labor to be performed by the contractor, vendor, his agents or employees.

"Minority" means a person who is a citizen or lawful permanent resident of the United States and who is:

- (a) Black (a person having origins in any of the black racial groups of Africa);
- (b) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);
- (c) Portuguese (a person of Portuguese, Brazilian or other Portuguese culture or origin, regardless of race);
- (d) Asian American (a person having origins in any of the original peoples of the Far East, South East Asia, the Indian Subcontinent, or the Pacific Islands);
- (e) American Indian and Alaskan Native (a person having origins in any of the original peoples of North America); or
- (f) 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)).

"Minority Business Enterprise" or "MBE" means a small business concern as defined pursuant to Section 3 of the Federal Small Business Act and implementing regulations, which is owned and controlled by one (1) or more minorities or women and which has been certified as a Minority Business Enterprise under these regulations by the Rhode Island Department of Administration. For the purposes of these regulations, an owned and controlled business means one:

- (a) which is at least 51% owned by one (1) 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 (1) or more minorities or women; and
- (b) whose management and daily business operations are controlled by one (1) or more such individuals.

"MBE Coordinator" means the official designated to have overall responsibility for promotion of minority business enterprises within each department and agency for each contract covered by these regulations. He or she shall be appointed not later than the time the Request for Proposal for each contract is submitted.

"Non-compliance" means the condition existing when a contractor has failed to implement the requirements of these regulations.

"Prime Contractor" means the contractor that is charged with total construction on a contract or group of contracts, portions of which are, or will be subcontracted to their parties.

"Specialty Contractor" means a contractor charged with total construction on a contract or group of contracts, portions of which will not be subcontracted to third parties.

"Vendor" means the party with which the State contracts to provide goods or services.

4. Policy

These regulations shall be construed in accordance with the policy of the State of Rhode Island that minority business enterprises (MBEs) shall have the maximum opportunity to participate in the performance of projects or provision of goods or services outlined hereunder.

5. Construction Contracts

(a) MBE Liaison Officer

The chief executive officer of each prime contractor shall designate an MBE Liaison Officer who will coordinate with the MBE Coordinator from the Department of Administration or other state department or agency responsible for monitoring the contract.

(b) Ten Percent (10%) Requirement

(i) Each Department shall structure its procedures for procuring construction contracts to attempt to achieve the result that a minimum of ten (10%) percent of the total dollar value of these procurements is made directly or indirectly from MBEs. This result shall be achieved through one of the two methods described in paragraphs 5(b) (ii) or 5 (b) (iii) below.

(ii) Prime Contractor Method. Each prime contractor shall ensure that a minimum of ten percent (10%) of the dollar value of work to be performed on a construction project will be performed by MBEs. The prime contractor must meet or exceed this requirement or demonstrate that it could not meet this requirement despite its good-faith efforts. A prime contractor that is an MBE will satisfy the ten percent (10%) requirement by ensuring that a least ten percent (10%) of the dollar volume of work performed under the contract is performed by its employees.

(iii) Construction Contracts not involving the use of prime contractors. In lieu of using the prime contractor method described in paragraph 5(b) (ii) above, a Department may meet the ten percent (10%) requirement under these regulations by ensuring that ten percent (10%) of the dollar value of construction contracts in the aggregate for each fiscal year is awarded to MBEs. MBEs may be solicited directly to accomplish this requirement.

(iv) The ten percent (10%) requirements set forth under these regulations can be satisfied concurrently with similar requirements mandated under federal law.

(v) Nothing in these regulations shall be construed to require the award of a contract to an MBE whose bid exceeds the lowest bid by five percent (5%). Nothing in these Regulations shall be construed to require the acceptance of non-conforming goods or services.

(c) Solicitation of Bids

All departments and agencies soliciting requests for proposals for construction projects identified as having subcontracting opportunities must include in the advertisements for the project the following language: "This project is subject to Chapter 37-14.1 of the Rhode Island General Laws, and regulations promulgated thereunder, which require that ten percent of the dollar value of work performed on the project be performed by minority business enterprises."

(ii) MBE Compliance Plan

A prospective prime contractor shall include in its bid on any construction project covered by these regulations, a simple statement acknowledging its obligation to meet the ten percent (10%) requirement under these regulations. After it has been identified as the apparent low bidder, the prime contractor shall, within ten (10) working days, prepare an MBE Compliance Plan and submit it to the Director or his designee for approval. The Plan shall identify by MBE name, subcontract dollar amount and type, each subcontract that the prime contractor projects will be awarded to MBEs over the period of the project.

(d) Approval or Disapproval of MBE Plan

(i) The Director or his designee will review and approve plans that reasonably ensure compliance with the ten percent (10%) requirement.

(ii) Where the prime contractor has proved that for reasons beyond the prime contractor's control, compliance with the ten percent (10%) requirement is impossible, the Director or his designee may approve a plan that ensures compliance with an MBE utilization rate of less than ten percent (10%). To prove impossibility of compliance, there shall be a hearing, which interested parties will be notified of and permitted to attend, during which the contractor shall demonstrate the following:

(1) The prime contractor is making all appropriate efforts, including those listed in paragraph 5 (e) of these regulations, to increase MBE participation in its construction project to the ten percent (10%) level.

(2) Despite the prime contractor's efforts, the prime contractor's plan represents a reasonable expectation for the participation of MBEs in state contracts given the availability of MBEs to work on the contract.

(iii) If the Director or his designee does not approve the plan the prime contractor has submitted, the prime contractor, after consulting with the Director or his designee, shall present a revised plan.

(iv) The Director may condition the approval or establishment of any adjusted requirement on any reasonable future action by the prime contractor.

(v) Each prime contract covered under these regulations shall include the following: "The contractor agrees to ensure that minority business enterprises as defined in R.I. Gen. Laws Section 37-14.1-3, shall have the maximum opportunity to participate in the performance of subcontracts performed under this agreement. The contractor will take all reasonable steps in accordance with regulations promulgated under Chapter 37-14.1 of the Rhode Island General Laws to ensure that minority business enterprises have the maximum opportunity to compete for and perform subcontracts under this agreement."

e. Compliance

(i) Each MBE coordinator will periodically conduct on-site inspections to determine compliance with the provisions of these regulations. The Division of Purchasing, the Director or the MBE Coordinator may require a prime contractor to furnish copies of purchase orders, subcontracts, cancelled checks, and other records that may indicate the number, names, dollar value of MBE subcontracts, dates, and schedule time for performance of work by an MBE subcontractor.

(ii) A prime contractor's failure to have an approved MBE Compliance Plan as required by these regulations constitutes non-compliance with these regulations.

(iii) If a prime contractor fails to meet the requirements outlined in its approved MBE Compliance Plan, it shall explain to the Director, in writing, why the requirements could not be met and why meeting the requirements was beyond the prime contractor's control.

(iv) To determine whether a prime contractor has a good faith reason for failing to meet its requirements, the Director may consider, among other factors:

(1) Whether the prime contractor attended any pre-solicitation or pre-bid meetings that were scheduled by the state contracting authority to inform MBEs of contracting or subcontracting opportunities;

(2) Whether the prime contractor advertised in general circulation, trade association, and minority focus media concerning the subcontracting opportunities;

(3) Whether the prime contractor provided written notice to a reasonable number of specific MBEs that their interest in a contract was being solicited, in sufficient time to allow the MBEs to participate effectively;

- (4) Whether the prime contractor followed up initial solicitations of interest by contacting MBEs to determine with certainty whether the MBEs were interested;
 - (5) Whether the prime contractor selected portions of work to be performed by MBEs in order to increase the likelihood of meeting MBE participation requirements (including, where appropriate, breaking down contracts into economically feasible units to facilitate MBE participation);
 - (6) Whether the prime contractor provided interested MBEs with adequate information about the plans, specifications and requirements of the contract;
 - (7) Whether the prime contractor negotiated in good faith with interested MBEs;
 - (8) Whether the prime contractor made suggestions to interested MBEs to assist them in obtaining bonding, lines of credit, or insurance required by the prime contractor;
 - (9) Whether the prime contractor effectively used the services of available minority community organizations, minority contractors' groups, local, state and Federal minority business assistance offices; and other organizations that provide assistance in the recruitment and placement of MBEs.
- (v) If the prime contractor does not make such an explanation, or if the Director determines that the prime contractor's explanation does not justify its failure to meet the requirements in its approved MBE Plan, the Director may direct the prime contractor to take appropriate remedial action. Failure to take remedial action directed by the Director is noncompliance with these regulations.
- (vi) In the event of non-compliance with these regulations, the Director may take appropriate enforcement action. Such action may include suspension of payments, termination of the contract, recovery by the state of 10% of the contract price as liquidated damages and/or denial of the right to participate in future projects for up to three (3) years.

TITLE 37

CHAPTER 16 PUBLIC WORKS ARBITRATION

Sections

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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.

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 nonsalaried 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 resolicitation 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 nonresponsibility 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.

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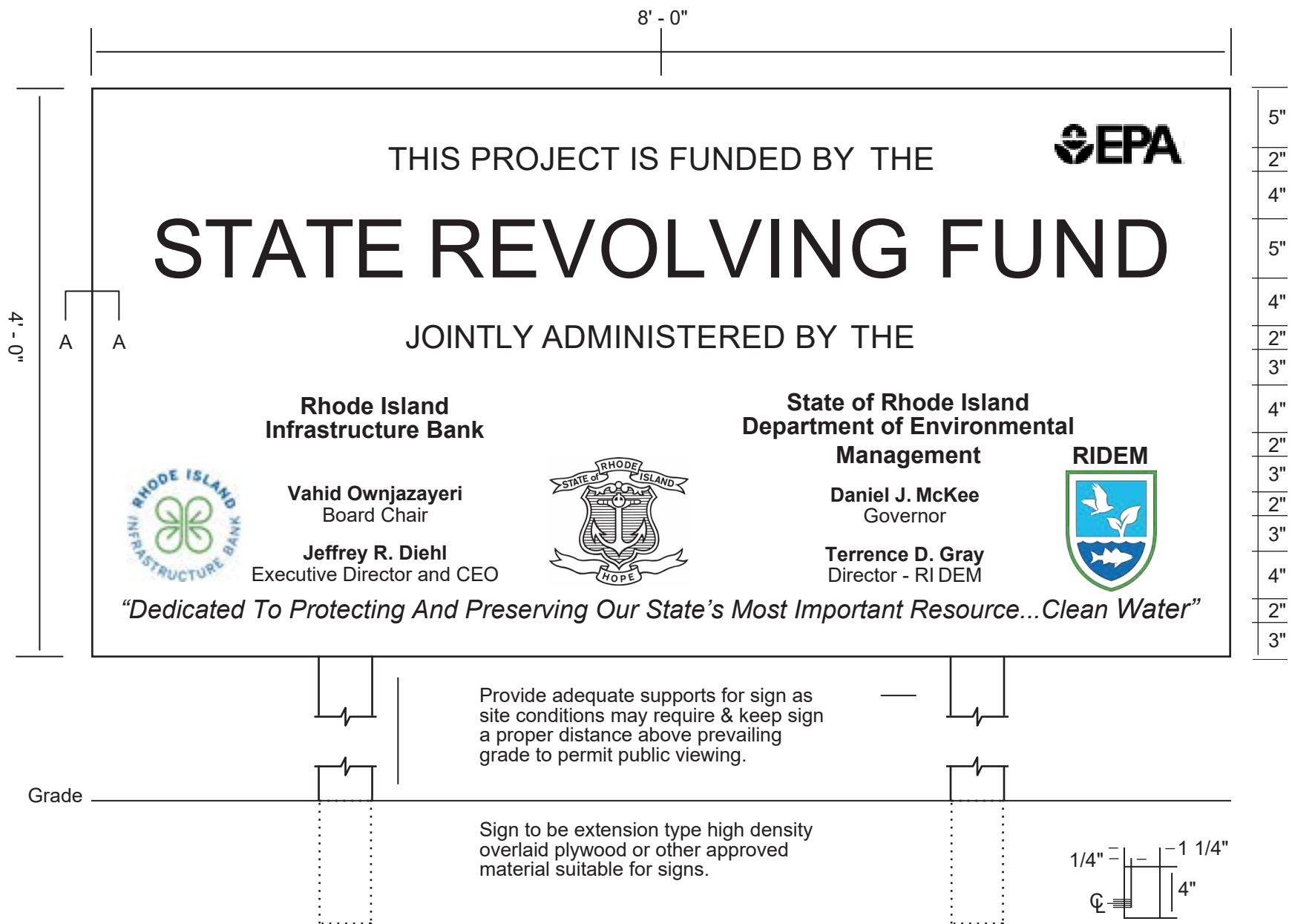
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DEBARMENT & SUSPENSION

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

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



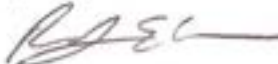
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460


MAR 20 2014

OFFICE OF WATER

MEMORANDUM

SUBJECT: Implementation of American Iron and Steel provisions of P.L. 113-76,
Consolidated Appropriations Act, 2014

FROM: ✓ Andrew D. Sawyers, Director 
Office of Wastewater Management (4201M)

Peter C. Grevatt, Director 
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TO: Water Management Division Directors
Regions I - X

P.L. 113-76, Consolidated Appropriations Act, 2014 (Act), includes an "American Iron and Steel (AIS)" requirement in section 436 that requires Clean Water State Revolving Loan Fund (CWSRF) and Drinking Water State Revolving Loan Fund (DWSRF) assistance recipients to use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, or repair of a public water system or treatment works if the project is funded through an assistance agreement executed beginning January 17, 2014 (enactment of the Act), through the end of Federal Fiscal Year 2014.

Section 436 also sets forth certain circumstances under which EPA may waive the AIS requirement. Furthermore, the Act specifically exempts projects where engineering plans and specifications were approved by a State agency prior to January 17, 2014.

The approach described below explains how EPA will implement the AIS requirement. The first section is in the form of questions and answers that address the types of projects that must comply with the AIS requirement, the types of products covered by the AIS requirement, and compliance. The second section is a step-by-step process for requesting waivers and the circumstances under which waivers may be granted.

Implementation

The Act states:

Sec. 436. (a)(1) None of the funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system or treatment works unless all of the iron and steel products used in the project are produced in the United States.

(2) In this section, the term “iron and steel products” means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

(b) Subsection (a) shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency (in this section referred to as the “Administrator”) finds that—

(1) applying subsection (a) would be inconsistent with the public interest;

(2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or

(3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

(c) If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public on an informal basis a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet Web site of the Environmental Protection Agency.

(d) This section shall be applied in a manner consistent with United States obligations under international agreements.

(e) The Administrator may retain up to 0.25 percent of the funds appropriated in this Act for the Clean and Drinking Water State Revolving Funds for carrying out

the provisions described in subsection (a)(1) for management and oversight of the requirements of this section.

(f) This section does not apply with respect to a project if a State agency approves the engineering plans and specifications for the project, in that agency's capacity to approve such plans and specifications prior to a project requesting bids, prior to the date of the enactment of this Act.

The following questions and answers provide guidance for implementing and complying with the AIS requirements:

Project Coverage

1) What classes of projects are covered by the AIS requirement?

All treatment works projects funded by a CWSRF assistance agreement, and all public water system projects funded by a DWSRF assistance agreement, from the date of enactment through the end of Federal Fiscal Year 2014, are covered. The AIS requirements apply to the entirety of the project, no matter when construction begins or ends. Additionally, the AIS requirements apply to all parts of the project, no matter the source of funding.

2) Does the AIS requirement apply to nonpoint source projects or national estuary projects?

No. Congress did not include an AIS requirement for nonpoint source and national estuary projects unless the project can also be classified as a 'treatment works' as defined by section 212 of the Clean Water Act.

3) Are any projects for the construction, alteration, maintenance, or repair of a public water system or treatment works excluded from the AIS requirement?

Any project, whether a treatment works project or a public water system project, for which engineering plans and specifications were approved by the responsible state agency prior to January 17, 2014, is excluded from the AIS requirements.

4) What if the project does not have approved engineering plans and specifications but has signed an assistance agreement with a CWSRF or DWSRF program prior to January 17, 2014?

The AIS requirements do not apply to any project for which an assistance agreement was signed prior to January 17, 2014.

5) What if the project does not have approved engineering plans and specifications, but bids were advertised prior to January 17, 2014 and an assistance agreement was signed after January 17, 2014?

If the project does not require approved engineering plans and specifications, the bid advertisement date will count in lieu of the approval date for purposes of the exemption in section 436(f).

6) What if the assistance agreement that was signed prior to January 17, 2014, only funded a part of the overall project, where the remainder of the project will be funded later with another SRF loan?

If the original assistance agreement funded any construction of the project, the date of the original assistance agreement counts for purposes of the exemption. If the original assistance agreement was only for planning and design, the date of that assistance agreement will count for purposes of the exemption only if there is a written commitment or expectation on the part of the assistance recipient to fund the remainder of the project with SRF funds.

7) What if the assistance agreement that was signed prior to January 17, 2014, funded the first phase of a multi-phase project, where the remaining phases will be funded by SRF assistance in the future?

In such a case, the phases of the project will be considered a single project if all construction necessary to complete the building or work, regardless of the number of contracts or assistance agreements involved, are closely related in purpose, time and place. However, there are many situations in which major construction activities are clearly undertaken in phases that are distinct in purpose, time, or place. In the case of distinct phases, projects with engineering plans and specifications approval or assistance agreements signed prior to January 17, 2014 would be excluded from AIS requirements while those approved/signed on January 17, 2014, or later would be covered by the AIS requirements.

8) What if a project has split funding from a non-SRF source?

Many States intend to fund projects with “split” funding, from the SRF program and from State or other programs. Based on the Act language in section 436, which requires that American iron and steel products be used in any project for the construction, alteration, maintenance, or repair of a public water system or treatment works receiving SRF funding between and including January 17, 2014 and September 30, 2014, any project that is funded in whole or in part with such funds must comply with the AIS requirement. A “project” consists of all construction necessary to complete the building or work regardless of the number of contracts or assistance agreements involved so long as all contracts and assistance agreements awarded are closely related in purpose, time and place. This precludes the intentional splitting of SRF projects into separate and smaller contracts or assistance agreements to avoid AIS coverage on some portion of a larger

project, particularly where the activities are integrally and proximately related to the whole. However, there are many situations in which major construction activities are clearly undertaken in separate phases that are distinct in purpose, time, or place, in which case, separate contracts or assistance agreement for SRF and State or other funding would carry separate requirements.

9) What about refinancing?

If a project began construction, financed from a non-SRF source, prior to January 17, 2014, but is refinanced through an SRF assistance agreement executed on or after January 17, 2014 and prior to October 1, 2014, AIS requirements will apply to all construction that occurs on or after January 17, 2014, through completion of construction, unless, as is likely, engineering plans and specifications were approved by a responsible state agency prior to January 17, 2014. There is no retroactive application of the AIS requirements where a refinancing occurs for a project that has completed construction prior to January 17, 2014.

10) Do the AIS requirements apply to any other EPA programs, besides the SRF program, such as the Tribal Set-aside grants or grants to the Territories and DC?

No, the AIS requirement only applies to funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12)

Covered Iron and Steel Products

11) What is an iron or steel product?

For purposes of the CWSRF and DWSRF projects that must comply with the AIS requirement, an iron or steel product is one of the following made primarily of iron or steel that is permanently incorporated into the public water system or treatment works:

- Lined or unlined pipes or fittings;
- Manhole Covers;
- Municipal Castings (defined in more detail below);
- Hydrants;
- Tanks;
- Flanges;
- Pipe clamps and restraints;
- Valves;
- Structural steel (defined in more detail below);
- Reinforced precast concrete; and
- Construction materials (defined in more detail below).

12) What does the term ‘primarily iron or steel’ mean?

‘Primarily iron or steel’ places constraints on the list of products above. For one of the listed products to be considered subject to the AIS requirements, it must be made of greater than 50% iron or steel, measured by cost. The cost should be based on the material costs.

13) Can you provide an example of how to perform a cost determination?

For example, the iron portion of a fire hydrant would likely be the bonnet, body and shoe, and the cost then would include the pouring and casting to create those components. The other material costs would include non-iron and steel internal workings of the fire hydrant (i.e., stem, coupling, valve, seals, etc). However, the assembly of the internal workings into the hydrant body would not be included in this cost calculation. If one of the listed products is not made primarily of iron or steel, United States (US) provenance is not required. An exception to this definition is reinforced precast concrete, which is addressed in a later question.

14) If a product is composed of more than 50% iron or steel, but is not listed in the above list of items, must the item be produced in the US? Alternatively, must the iron or steel in such a product be produced in the US?

The answer to both question is no. Only items on the above list must be produced in the US. Additionally, the iron or steel in a non-listed item can be sourced from outside the US.

15) What is the definition of steel?

Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements. Metallic elements such as chromium, nickel, molybdenum, manganese, and silicon may be added during the melting of steel for the purpose of enhancing properties such as corrosion resistance, hardness, or strength. The definition of steel covers carbon steel, alloy steel, stainless steel, tool steel and other specialty steels.

16) What does ‘produced in the United States’ mean?

Production in the United States of the iron or steel products used in the project requires that all manufacturing processes, including application of coatings, must take place in the United States, with the exception of metallurgical processes involving refinement of steel additives. All manufacturing processes includes processes such as melting, refining, forming, rolling, drawing, finishing, fabricating and coating. Further, if a domestic iron and steel product is taken out of the US for any part of the manufacturing process, it becomes foreign source material. However, raw materials such as iron ore, limestone and iron and steel scrap are not covered by the AIS requirement, and the

material(s), if any, being applied as a coating are similarly not covered. Non-iron or steel components of an iron and steel product may come from non-US sources. For example, for products such as valves and hydrants, the individual non-iron and steel components do not have to be of domestic origin.

17) Are the raw materials used in the production of iron or steel required to come from US sources?

No. Raw materials, such as iron ore, limestone, scrap iron, and scrap steel, can come from non-US sources.

18) If an above listed item is primarily made of iron or steel, but is only at the construction site temporarily, must such an item be produced in the US?

No. Only the above listed products made primarily of iron or steel, permanently incorporated into the project must be produced in the US. For example trench boxes, scaffolding or equipment, which are removed from the project site upon completion of the project, are not required to be made of U.S. Iron or Steel.

19) What is the definition of ‘municipal castings’?

Municipal castings are cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and surface infrastructure. They are typically made of grey or ductile iron, or steel. Examples of municipal castings are:

- Access Hatches;
- Ballast Screen;
- Benches (Iron or Steel);
- Bollards;
- Cast Bases;
- Cast Iron Hinged Hatches, Square and Rectangular;
- Cast Iron Riser Rings;
- Catch Basin Inlet;
- Cleanout/Monument Boxes;
- Construction Covers and Frames;
- Curb and Corner Guards;
- Curb Openings;
- Detectable Warning Plates;
- Downspout Shoes (Boot, Inlet);
- Drainage Grates, Frames and Curb Inlets;
- Inlets;
- Junction Boxes;
- Lampposts;
- Manhole Covers, Rings and Frames, Risers;

Meter Boxes;
Service Boxes;
Steel Hinged Hatches, Square and Rectangular;
Steel Riser Rings;
Trash receptacles;
Tree Grates;
Tree Guards;
Trench Grates; and
Valve Boxes, Covers and Risers.

20) What is ‘structural steel’?

Structural steel is rolled flanged shapes, having at least one dimension of their cross-section three inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other constructional purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees and zeeks. Other shapes include H-piles, sheet piling, tie plates, cross ties, and those for other special purposes.

21) What is a ‘construction material’ for purposes of the AIS requirement?

Construction materials are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered “structural steel”. This includes, but is not limited to, the following products: wire rod, bar, angles, concrete reinforcing bar, wire, wire cloth, wire rope and cables, tubing, framing, joists, trusses, fasteners (i.e., nuts and bolts), welding rods, decking, grating, railings, stairs, access ramps, fire escapes, ladders, wall panels, dome structures, roofing, ductwork, surface drains, cable hanging systems, manhole steps, fencing and fence tubing, guardrails, doors, and stationary screens.

22) What is not considered a ‘construction material’ for purposes of the AIS requirement?

Mechanical and electrical components, equipment and systems are not considered construction materials. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.

The following examples (including their appurtenances necessary for their intended use and operation) are NOT considered construction materials: pumps, motors, gear reducers, drives (including variable frequency drives (VFDs)), electric/pneumatic/manual accessories used to operate valves (such as electric valve actuators), mixers, gates, motorized screens (such as traveling screens), blowers/aeration equipment, compressors, meters, sensors, controls and switches, supervisory control and

data acquisition (SCADA), membrane bioreactor systems, membrane filtration systems, filters, clarifiers and clarifier mechanisms, rakes, grinders, disinfection systems, presses (including belt presses), conveyors, cranes, HVAC (excluding ductwork), water heaters, heat exchangers, generators, cabinetry and housings (such as electrical boxes/enclosures), lighting fixtures, electrical conduit, emergency life systems, metal office furniture, shelving, laboratory equipment, analytical instrumentation, and dewatering equipment.

23) If the iron or steel is produced in the US, may other steps in the manufacturing process take place outside of the US, such as assembly?

No. Production in the US of the iron or steel used in a listed product requires that all manufacturing processes must take place in the United States, except metallurgical processes involving refinement of steel additives.

24) What processes must occur in the US to be compliant with the AIS requirement for reinforced precast concrete?

While reinforced precast concrete may not be at least 50% iron or steel, in this particular case, the reinforcing bar and wire must be produced in the US and meet the same standards as for any other iron or steel product. Additionally, the casting of the concrete product must take place in the US. The cement and other raw materials used in concrete production are not required to be of domestic origin.

If the reinforced concrete is cast at the construction site, the reinforcing bar and wire are considered to be a construction material and must be produced in the US.

Compliance

25) How should an assistance recipient document compliance with the AIS requirement?

In order to ensure compliance with the AIS requirement, specific AIS contract language must be included in each contract, starting with the assistance agreement, all the way down to the purchase agreements. Sample language for assistance agreements and contracts can be found in Appendix 3 and 4.

EPA recommends the use of a step certification process, similar to one used by the Federal Highway Administration. The step certification process is a method to ensure that producers adhere to the AIS requirement and assistance recipients can verify that products comply with the AIS requirement. The process also establishes accountability and better enables States to take enforcement actions against violators.

Step certification creates a paper trail which documents the location of the manufacturing process involved with the production of steel and iron materials. A step certification is a process under which each handler (supplier, fabricator, manufacturer,

processor, etc) of the iron and steel products certifies that their step in the process was domestically performed. Each time a step in the manufacturing process takes place, the manufacturer delivers its work along with a certification of its origin. A certification can be quite simple. Typically, it includes the name of the manufacturer, the location of the manufacturing facility where the product or process took place (not its headquarters), a description of the product or item being delivered, and a signature by a manufacturer's responsible party. Attached, as Appendix 5, are sample certifications. These certifications should be collected and maintained by assistance recipients.

Alternatively, the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes occurred in the US. While this type of certification may be acceptable, it may not provide the same degree of assurance. Additional documentation may be needed if the certification is lacking important information. Step certification is the best practice.

26) How should a State ensure assistance recipients are complying with the AIS requirement?

In order to ensure compliance with the AIS requirement, States SRF programs must include specific AIS contract language in the assistance agreement. Sample language for assistance agreements can be found in Appendix 3.

States should also, as a best practice, conduct site visits of projects during construction and review documentation demonstrating proof of compliance which the assistance recipient has gathered.

27) What happens if a State or EPA finds a non-compliant iron and/or steel product permanently incorporated in the project?

If a potentially non-compliant product is identified, the State should notify the assistance recipient of the apparent unauthorized use of the non-domestic component, including a proposed corrective action, and should be given the opportunity to reply. If unauthorized use is confirmed, the State can take one or more of the following actions: request a waiver where appropriate; require the removal of the non-domestic item; or withhold payment for all or part of the project. Only EPA can issue waivers to authorize the use of a non-domestic item. EPA may use remedies available to it under the Clean Water Act, the Safe Drinking Water Act, and 40 CFR part 31 grant regulations, in the event of a violation of a grant term and condition.

It is recommended that the State work collaboratively with EPA to determine the appropriate corrective action, especially in cases where the State is the one who identifies the item in noncompliance or there is a disagreement with the assistance recipient.

If fraud, waste, abuse, or any violation of the law is suspected, the Office of Inspector General (OIG) should be contacted immediately. The OIG can be reached at 1-

888-546-8740 or OIG_Hotline@epa.gov. More information can be found at this website: <http://www.epa.gov/oig/hotline.htm>.

28) How do international trade agreements affect the implementation of the AIS requirements?

The AIS provision applies in a manner consistent with United States obligations under international agreements. Typically, these obligations only apply to direct procurement by the entities that are signatories to such agreements. In general, SRF assistance recipients are not signatories to such agreements, so these agreements have no impact on this AIS provision. In the few instances where such an agreement applies to a municipality, that municipality is under the obligation to determine its applicability and requirements and document the actions taken to comply for the State.

Waiver Process

The statute permits EPA to issue waivers for a case or category of cases where EPA finds (1) that applying these requirements would be inconsistent with the public interest; (2) iron and steel products are not produced in the US in sufficient and reasonably available quantities and of a satisfactory quality; or (3) inclusion of iron and steel products produced in the US will increase the cost of the overall project by more than 25 percent.

In order to implement the AIS requirements, EPA has developed an approach to allow for effective and efficient implementation of the waiver process to allow projects to proceed in a timely manner. The framework described below will allow States, on behalf of the assistance recipients, to apply for waivers of the AIS requirement directly to EPA Headquarters. Only waiver requests received from states will be considered. Pursuant to the Act, EPA has the responsibility to make findings as to the issuance of waivers to the AIS requirements.

Definitions

The following terms are critical to the interpretation and implementation of the AIS requirements and apply to the process described in this memorandum:

Reasonably Available Quantity: The quantity of iron or steel products is available or will be available at the time needed and place needed, and in the proper form or specification as specified in the project plans and design.

Satisfactory Quality: The quality of iron or steel products, as specified in the project plans and designs.

Assistance Recipient: A borrower or grantee that receives funding from a State CWSRF or DWSRF program.

Step-By-Step Waiver Process

Application by Assistance Recipient

Each local entity that receives SRF water infrastructure financial assistance is required by section 436 of the Act to use American made iron and steel products in the construction of its project. However, the recipient may request a waiver. Until a waiver is granted by EPA, the AIS requirement stands, except as noted above with respect to municipalities covered by international agreements.

The waiver process begins with the SRF assistance recipient. In order to fulfill the AIS requirement, the assistance recipient must in good faith design the project (where applicable) and solicit bids for construction with American made iron and steel products. It is essential that the assistance recipient include the AIS terms in any request for proposals or solicitations for bids, and in all contracts (see Appendix 3 for sample construction contract language). The assistance recipient may receive a waiver at any point before, during, or after the bid process, if one or more of three conditions is met:

1. Applying the American Iron and Steel requirements of the Act would be inconsistent with the public interest;
2. Iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or
3. Inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

Proper and sufficient documentation must be provided by the assistance recipient. A checklist detailing the types of information required for a waiver to be processed is attached as Appendix 1.

Additionally, it is strongly encouraged that assistance recipients hold pre-bid conferences with potential bidders. A pre-bid conference can help to identify iron and steel products needed to complete the project as described in the plans and specifications that may not be available from domestic sources. It may also identify the need to seek a waiver prior to bid, and can help inform the recipient on compliance options.

In order to apply for a project waiver, the assistance recipient should email the request in the form of a Word document (.doc) to the State SRF program. It is strongly recommended that the State designate a single person for all AIS communications. The State SRF designee will review the application for the waiver and determine whether the necessary information has been included. Once the waiver application is complete, the State designee will forward the application to either of two email addresses. For CWSRF waiver requests, please send the application to: cwsrfwaiver@epa.gov. For DWSRF waiver requests, please send the application to: dwsrfwaiver@epa.gov.

Evaluation by EPA

After receiving an application for waiver of the AIS requirements, EPA Headquarters will publish the request on its website for 15 days and receive informal comment. EPA Headquarters will then use the checklist in Appendix 2 to determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver – that it is quantitatively and qualitatively sufficient – and to determine whether or not to grant the waiver.

In the event that EPA finds that adequate documentation and justification has been submitted, the Administrator may grant a waiver to the assistance recipient. EPA will notify the State designee that a waiver request has been approved or denied as soon as such a decision has been made. Granting such a waiver is a three-step process:

1. Posting – After receiving an application for a waiver, EPA is required to publish the application and all material submitted with the application on EPA's website for 15 days. During that period, the public will have the opportunity to review the request and provide informal comment to EPA. The website can be found at: http://water.epa.gov/grants_funding/aisrequirement.cfm
2. Evaluation – After receiving an application for waiver of the AIS requirements, EPA Headquarters will use the checklist in Appendix 2 to determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver – that it is quantitatively and qualitatively sufficient – and to determine whether or not to grant the waiver.
3. Signature of waiver approval by the Administrator or another agency official with delegated authority – As soon as the waiver is signed and dated, EPA will notify the State SRF program, and post the signed waiver on our website. The assistance recipient should keep a copy of the signed waiver in its project files.

Public Interest Waivers

EPA has the authority to issue public interest waivers. Evaluation of a public interest waiver request may be more complicated than that of other waiver requests so they may take more time than other waiver requests for a decision to be made. An example of a public interest waiver that might be issued could be for a community that has standardized on a particular type or manufacturer of a valve because of its performance to meet their specifications. Switching to an alternative valve may require staff to be trained on the new equipment and additional spare parts would need to be purchased and stocked, existing valves may need to be unnecessarily replaced, and portions of the system may need to be redesigned. Therefore, requiring the community to install an alternative valve would be inconsistent with public interest.

EPA also has the authority to issue a public interest waiver that covers categories of products that might apply to all projects.

EPA reserves the right to issue national waivers that may apply to particular classes of assistance recipients, particular classes of projects, or particular categories of iron or steel products. EPA may develop national or (US geographic) regional categorical waivers through the identification of similar circumstances in the detailed justifications presented to EPA in a waiver request or requests. EPA may issue a national waiver based on policy decisions regarding the public's interest or a determination that a particular item is not produced domestically in reasonably available quantities or of a sufficient quality. In such cases, EPA may determine it is necessary to issue a national waiver.

If you have any questions concerning the contents of this memorandum, you may contact us, or have your staff contact Jordan Dorfman, Attorney-Advisor, State Revolving Fund Branch, Municipal Support Division, at dorfman.jordan@epa.gov or (202) 564-0614 or Kiri Anderer, Environmental Engineer, Infrastructure Branch, Drinking Water Protection Division, at anderer.kirsten@epa.gov or (202) 564-3134.

Attachments

Appendix 1: Information Checklist for Waiver Request

The purpose of this checklist is to help ensure that all appropriate and necessary information is submitted to EPA. EPA recommends that States review this checklist carefully and provide all appropriate information to EPA. This checklist is for informational purposes only and does not need to be included as part of a waiver application.

Items	✓	Notes
<p>General</p> <ul style="list-style-type: none"> • Waiver request includes the following information: <ul style="list-style-type: none"> — Description of the foreign and domestic construction materials — Unit of measure — Quantity — Price — Time of delivery or availability — Location of the construction project — Name and address of the proposed supplier — A detailed justification for the use of foreign construction materials • Waiver request was submitted according to the instructions in the memorandum • Assistance recipient made a good faith effort to solicit bids for domestic iron and steel products, as demonstrated by language in requests for proposals, contracts, and communications with the prime contractor 		
<p>Cost Waiver Requests</p> <ul style="list-style-type: none"> • Waiver request includes the following information: <ul style="list-style-type: none"> — Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products — Relevant excerpts from the bid documents used by the contractors to complete the comparison — Supporting documentation indicating that the contractor made a reasonable survey of the market, such as a description of the process for identifying suppliers and a list of contacted suppliers 		
<p>Availability Waiver Requests</p> <ul style="list-style-type: none"> • Waiver request includes the following supporting documentation necessary to demonstrate the availability, quantity, and/or quality of the materials for which the waiver is requested: <ul style="list-style-type: none"> — Supplier information or pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials — Documentation of the assistance recipient's efforts to find available domestic sources, such as a description of the process for identifying suppliers and a list of contacted suppliers. — Project schedule — Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials • Waiver request includes a statement from the prime contractor and/or supplier confirming the non-availability of the domestic construction materials for which the waiver is sought • Has the State received other waiver requests for the materials described in this waiver request, for comparable projects? 		

Appendix 2: HQ Review Checklist for Waiver Request

Instructions: To be completed by EPA. Review all waiver requests using the questions in the checklist, and mark the appropriate box as Yes, No or N/A. Marks that fall inside the shaded boxes may be grounds for denying the waiver. If none of your review markings fall into a shaded box, the waiver is eligible for approval if it indicates that one or more of the following conditions applies to the domestic product for which the waiver is sought:

1. The iron and/or steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.
2. The inclusion of iron and/or steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

Review Items	Yes	No	N/A	Comments
Cost Waiver Requests				
• Does the waiver request include the following information?				
— Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products				
— Relevant excerpts from the bid documents used by the contractors to complete the comparison				
— A sufficient number of bid documents or pricing information from domestic sources to constitute a reasonable survey of the market				
• Does the Total Domestic Project exceed the Total Foreign Project Cost by more than 25%?				
Availability Waiver Requests				
• Does the waiver request include supporting documentation sufficient to show the availability, quantity, and/or quality of the iron and/or steel product for which the waiver is requested?				
— Supplier information or other documentation indicating availability/delivery date for materials				
— Project schedule				
— Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of materials				
• Does supporting documentation provide sufficient evidence that the contractors made a reasonable effort to locate domestic suppliers of materials, such as a description of the process for identifying suppliers and a list of contacted suppliers?				
• Based on the materials delivery/availability date indicated in the supporting documentation, will the materials be unavailable when they are needed according to the project schedule? (By item, list schedule date and domestic delivery quote date or other relevant information)				
• Is EPA aware of any other evidence indicating the non-availability of the materials for which the waiver is requested?				
Examples include:				
— Multiple waiver requests for the materials described in this waiver request, for comparable projects in the same State				
— Multiple waiver requests for the materials described in this waiver request, for comparable projects in other States				
— Correspondence with construction trade associations indicating the non-availability of the materials				
• Are the available domestic materials indicated in the bid documents of inadequate quality compared those required by the project plans, specifications, and/or permits?				

Appendix 3: Example Loan Agreement Language

ALL ASSISTANCE AGREEMENT MUST HAVE A CLAUSE REQUIRING COMPLIANCE WITH THE AIS REQUIREMENT. THIS IS AN EXAMPLE OF WHAT COULD BE INCLUDED IN SRF ASSISTANCE AGREEMENTS. EPA MAKES NO CLAIMS REGARDING THE LEGALITY OF THIS CLAUSE WITH RESPECT TO STATE LAW:

Comply with all federal requirements applicable to the Loan (including those imposed by the 2014 Appropriations Act and related SRF Policy Guidelines) which the Participant understands includes, among other, requirements that all of the iron and steel products used in the Project are to be produced in the United States (“American Iron and Steel Requirement”) unless (i) the Participant has requested and obtained a waiver from the Agency pertaining to the Project or (ii) the Finance Authority has otherwise advised the Participant in writing that the American Iron and Steel Requirement is not applicable to the Project.

Comply with all record keeping and reporting requirements under the Clean Water Act/Safe Drinking Water Act, including any reports required by a Federal agency or the Finance Authority such as performance indicators of program deliverables, information on costs and project progress. The Participant understands that (i) each contract and subcontract related to the Project is subject to audit by appropriate federal and state entities and (ii) failure to comply with the Clean Water Act/Safe Drinking Water Act and this Agreement may be a default hereunder that results in a repayment of the Loan in advance of the maturity of the Bonds and/or other remedial actions.

Appendix 4: Sample Construction Contract Language

ALL CONTRACTS MUST HAVE A CLAUSE REQUIRING COMPLIANCE WITH THE AIS REQUIREMENT. THIS IS AN EXAMPLE OF WHAT COULD BE INCLUDED IN ALL CONTRACTS IN PROJECTS THAT USE SRF FUNDS. EPA MAKES NO CLAIMS REGARDING THE LEGALITY OF THIS CLAUSE WITH RESPECT TO STATE OR LOCAL LAW:

The Contractor acknowledges to and for the benefit of the City of _____ (“Purchaser”) and the _____ (the “State”) that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or 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 to 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 as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Purchaser or State resulting from any 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 its 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.

Appendix 5: Sample Certifications

The following information is provided as a sample letter of **step** certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Step Certification for Project (XXXXXXXXXX)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for the subject project is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. XXXX
2. XXXX
3. XXXX

Such process took place at the following location:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

The following information is provided as a sample letter of certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Certification for Project (XXXXXXXXXX)

I, (company representative), certify that the following products and/or materials shipped/provided to the subject project are in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. XXXX
2. XXXX
3. XXXX

Such process took place at the following location:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

Date _____

I, _____
(Name of Signatory Party) (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by _____ on the _____
(Contractor or Subcontractor)
_____ ; that during the payroll period commencing on the _____
(Building or Work)
_____ day of _____, _____, and ending the _____ day of _____, _____,
all persons employed on said project have been paid the full weekly wages earned, that no rebates have
been or will be made either directly or indirectly to or on behalf of said
_____ from the full
(Contractor or Subcontractor)

weekly wages earned by any person and that no deductions have been made either directly or indirectly
from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part
3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948,
63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are
correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the
applicable wage rates contained in any wage determination incorporated into the contract; that the classifications
set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship
program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and
Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered
with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:
(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

- in addition to the basic hourly wage rates paid to each laborer or mechanic listed in
the above referenced payroll, payments of fringe benefits as listed in the contract
have been or will be made to appropriate programs for the benefit of such employees,
except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

- Each laborer or mechanic listed in the above referenced payroll has been paid,
as indicated on the payroll, an amount not less than the sum of the applicable
basic hourly wage rate plus the amount of the required fringe benefits as listed
in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR
SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 3729 OF
TITLE 31 OF THE UNITED STATES CODE.



RI Department of Labor and Training - Division of Workforce Regulation & Safety

Professional Regulation Unit/Prevailing Wage Section

1511 Pontiac Avenue Building 70, P.O. Box 20247 Cranston, RI 02920-0943

Rhode Island Certified Weekly Payroll

Contractor:	_____	Subcontractor:	_____
Address:	_____	Address:	_____
City/Town:	_____	State:	_____
Phone #:	_____	City/Town:	_____
Email:	_____	State:	_____
Project/Location:	_____	Phone #:	_____
For Week Ending:	_____	Wage Decision #:	_____
		Email:	_____
		Decision Date:	_____

****NOTE:** If an employee works more than one trade, please list each classification on separate lines with the corresponding hours they performed that trade and hourly rate paid.

Name, Address and Phone Number of Employee	Work Classification	Date:	S	M	T	W	T	F	S	Total Hrs	Hourly Rate (List all Rates)	Hourly Fringe Benefit	Weekly Gross	Weekly Deductions						
	Apprentice %		Hours Worked Each Day											Social Security	Medi- care	Withheld		RI TDI	*Other	Weekly Net
																Federal	State			
		P.S.																		
		P.O.																		
		A.P.S.																		
		A.P.O.																		
		R.H.																		
		R.O.																		
		P.S.																		
		P.O.																		
		A.P.S.																		
		A.P.O.																		
		R.H.																		
		R.O.																		
		P.S.																		
		P.O.																		
		A.P.S.																		
		A.P.O.																		
		R.H.																		
		R.O.																		
		P.S.																		
		P.O.																		
		A.P.S.																		
		A.P.O.																		
		R.H.																		
		R.O.																		

Legend: P.S.=Prevailing Wage Standard Hours P.O.=Prevailing Wage Overtime Hours R.H.=Regular Hours R.O.=Regular Overtime Hours APS= Additional PW Standard Hours APO=Additional PW Overtime Hours

List all PW Projects in APS/APO: _____

*Deductions listed in "Other" column: _____

STATEMENT OF COMPLIANCE

I, _____ do hereby state:

(print name and title of signatory party)

(1) That I pay or supervise the payment of the persons employed by: _____
(contractor or subcontractor)

on the _____, that during the payroll period commencing on _____
(project)
_____ day of _____, 20____, and ending on the _____ day of _____, 20____
(day) *(month)* *(year)* *(day)* *(month)* *(year)*

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said _____ from the full weekly wages earned by any person and that no deductions have been

(contractor or subcontractor)

made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Rhode Island General Law Chapter 28-14.

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in the appropriate wage determination for the project; that the classifications set forth therein for each laborer or mechanic conform with the work they performed.

(3) That the apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with the Rhode Island State Apprenticeship Council.

(4) That: **(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS OR PROGRAMS**

In addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made when due, to appropriate programs for the benefit of such employees.

Fringe Benefits Explanation: Bona fide fringe benefits are those paid to approved plans, funds or programs except those required by Federal or State Law.

Please specify the type of benefits provided:

1.) Medical or hospital care: _____

4.) Disability: _____

2.) Pension or Retirement: _____

5.) Vacation, sick, holiday: _____

3.) Life Insurance: _____

6.) Other (please specify): _____

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

Each laborer or mechanic listed in the above referenced payroll has been paid as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the rate schedule.

(5) In accordance with Chapter 37-13-13, it is mandatory that contractors use these forms for all Rhode Island Department of Labor requests for certified copies of payroll. Failure to submit information on these forms will constitute non-compliance by the responding contractor. These forms must be signed by the owner or an officer of the corporation, certifying that this is a true and exact copy of their payroll records.

SIGNATURE OF OWNER OR OFFICER OF CORPORATION

PRINT NAME & TITLE

DATE

My signature hereon constitutes my affirmation that the information contained herein is true and accurate regarding the number of employees participating in the prevailing wage program, the prevailing wage standard hours each employee worked, prevailing wage overtime hours, regular hours and overtime hours for each employee as well as the gross wages for each employee. I have confirmed and attest that all the information contained in this document is correct and I understand and acknowledge by my signature that if I provide any inaccurate information on this form, I may be subject to civil penalties and/or referral to the Rhode Island Attorney General for criminal prosecution.

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:

Project Name & Location:

Original Prime Contract Amount: \$ _____ **Current Prime Contract Amount: \$** _____ **% Complete: _____**

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

Instructions for Preparing RI Certified Weekly Payroll Forms

Certified Payroll Heading:

Employer name & address: Enter name, address, phone number and e-mail of General Contractor and Sub-contractor (if applicable).

Week Ending: Enter Week ending date.

Project: Enter the name and location of the Prevailing Wage project.

Wage Decision Number: Enter the applicable Wage Decision number. This number is found on the top of the first page of the Davis Bacon Prevailing Wage Rate schedule that applies to the project.

Date of Decision: Enter the date of the Wage Decision that applies to the project. This date is found on the top of the first page of the Davis Bacon Prevailing Wage Rate schedule that applies to the project.

Payroll Information by column:

1. Employee Name, Address & Phone Number: Enter the name, address & phone number of all employees working on the project.
2. Work Classification: Enter the specific work classification from the Davis Bacon Prevailing Wage Rate schedule that applies to the specific type of work each employee is performing on the project. If an employee performs more than one trade on a project, each classification, corresponding hours worked, and hourly rates paid must be listed separately. ***Note:** For indentured apprentices, indicate the percentage they are being paid at in accordance with the rate scale of their specific apprenticeship agreement.
3. Date: List dates under corresponding day of week that work is performed.
4. Hours Worked: List hours worked for each day. All hours (both prevailing wage and non-prevailing wage) must be listed.
 - Straight Time hours worked on the Prevailing Wage Project must be listed under P.S.
 - Overtime hours worked on the Prevailing Wage Project must be listed under P.O.
 - Straight Time hours worked on another RI Prevailing Wage Project must be listed under A.P.S.
 - Overtime Time hours worked on another RI Prevailing Wage Project must be listed under A.P.O.
 - Straight Time hours worked on Non-RI Prevailing Wage Projects must be listed under R.H.
 - Overtime hours worked on Non-RI Prevailing Wage Projects must be listed under R.O.
5. Total Hours: List on each line total number of hours worked for entire week for each type (P.S., P.O., A.P.S., A.P.O., R.H., & R.O.) of hours worked.
6. Hourly Pay Rate: List amount of pay per hour paid to each worker. This is the hourly rate actually paid in each individual's paycheck. All hourly rates (both prevailing wage and non-prevailing wage) must be listed.

7. Hourly Fringe Rate: List the hourly fringe benefit credit the employer is taking for each employee. ***Note**: The type of bona fide fringe benefits must be specifically listed on the RI Statement of Compliance form.
8. Gross Wages: The gross amount of wages paid to each employee must be listed.
9. Deductions: List deductions in applicable areas. ***Note**: Any amounts indicated in the “other” column must be specifically defined on the bottom of the form.
10. Net Wages: The net amount of wages paid to each employee must be listed.
11. List all PW Projects in APS/APO: List the name(s) of all RI Prevailing Wage Projects that account for hours listed in the A.P.S. & A.P.O. columns.



RI Department of Labor and Training
Division of Workforce Regulation & Safety
Professional Regulation Unit/Prevailing Wage Section
1511 Pontiac Avenue Building 70, P.O. Box 20247 Cranston, RI 02920-0943

Page: _____

Rhode Island Certified Prevailing Wage Daily Log

Project Name: _____

Contractor: _____

Project Location: _____

Address: _____

Date: _____

City/Town: _____ State _____ Zip _____

Employee Name (Print)	Job Title/ Classification	Time		Employee Signature
		In	Out	

I _____ hereby certify that the information in this form is complete and correct.
(print name and title)

Any contractor who knowingly maintains a false or fraudulent daily log maybe penalized by the Department of Labor and Training up to \$500 for each calendar day of noncompliance.

Contractor/Officer's Signature

Date

***Each contractor working on this project must complete a Daily Log for their employees only.**

DLT is an equal opportunity employer/program - auxiliary aids and services available upon request. TTY via RI Relay: 711

DLT-WRS-4 (10/14)



**State of Rhode Island and Providence Plantations
Office of Diversity, Equity and Opportunity (ODEO)
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) 574-8670. The directory of all certified MBE firms is also located at <http://odeo.ri.gov/>.

Signature of Authorized Agent of Business: _____ Date: _____

Send Completed Form to:
Dorinda Keene, Assistant Administrator - MBE
Office of Diversity, Equity and Opportunity (ODEO)
Minority Business Enterprise Compliance Office
One Capitol Hill, 3rd Floor
Providence, RI 02908
Phone: (401) 574-8670
Dorinda.Keene@doa.ri.gov