

CITY OF WARWICK, RHODE ISLAND
FRANK J. PICOZZI, MAYOR

WARWICK SEWER AUTHORITY

GARY C. JARVIS, CHAIRMAN

GARY P. MARINO

THOMAS H. CHADRONET

CARLO E. PISATURO, JR.

PETER T. GINAITT

SCOTT GOODINSON

SCOTT PHILLIPS

BETTYANNE ROGERS, EXECUTIVE DIRECTOR



**TECHNICAL SPECIFICATIONS
FOR**

**OAKLAND BEACH FORCE MAIN
REHABILITATION**

CONTRACT NO. **XX**

PREPARED BY:



GAROFALO

Garofalo & Associates, Inc.

85 Corliss Street, Providence, RI 02940

Tel.: (401).273.6000; Fax: (401).273.1000

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SECTION 00100

NOTICE TO CONTRACTORS

OWNER: The City of Warwick, Rhode Island
Acting Herein Through its Warwick Sewer Authority

ENGINEER: Garofalo & Associates, Inc.
85 Corliss Street, PO Box 6145
Providence, Rhode Island 02940
Phone: 401-273-6000

PROJECT: Oakland Beach Force Main Rehabilitation
Contract No. XX

The Warwick Sewer Authority, hereinafter referred to as the "Authority," will receive bids for the rehabilitation of approximately 8,370 feet of existing 12-inch diameter asbestos-cement (AC) sewer force main; temporary bypass pumping operations; sewer structures; paving, and all appurtenant construction and details, complete.

All bids must be on a unit price or lump sum basis, with total aggregate price of all unit items. Segregated bids will not be accepted.

Bids will be received at the offices of the Authority, located at 125 Arthur W. Devine Boulevard, Warwick, Rhode Island until **10:00 am** prevailing time on **____, ____ XX, 20XX**, at which time they will be publicly opened and read aloud. All interested parties are invited to attend.

The Contract Documents may be examined at The Warwick Sewer Authority, 125 Arthur W. Devine Boulevard, Warwick, Rhode Island. Electronic copies of the Contract Documents will be available for pick up in person only, every day except Saturdays, Sundays, and Holidays between the hours of 8:00 a.m. to 4:00 p.m., starting on **____ XX, 20XX**, at the offices of the Warwick Sewer Authority, 125 Arthur W. Devine Boulevard, Warwick, Rhode Island. Electronic copies of the Contract Documents will not be forwarded electronically or by mail.

Each bidder must deposit with his Bid, security in the amount, form, and subject to the conditions set forth in the "Information for Bidders", in the amount of 10% of Bid.

The bidder must agree to commence work on or before a date to be specified in a written "Notice to Proceed" by the Authority and to fully complete the project within 365 consecutive calendar days thereafter.

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Attention of the bidders is particularly called to the requirements as to conditions of employment to be observed and minimum wage rates to be paid under the Contract. In conformity with the provisions of Chapter 13 of Title 37, General Laws, Rhode Island, 1956, as amended, the minimum wages for a days work paid to craftsman, teamsters and laborers shall be not less than the customary and prevailing rate of wages for a days work in the locality where the work is undertaken. Such schedule of wages has been established on a minimum hourly basis and is on file in the office of the State Department of Labor.

The bidder's attention is also called to the "Equal Opportunity Clause," The Nondiscrimination in Employment," and the Federal and State MBE/WBE requirements of the Contract as set forth in the Contract Documents.

The bidders will be required to meet the established goal of not less than 10 percent of the contract bid price to the contractors, subcontractors, and/or suppliers which qualify as DISADVANTAGED BUSINESS ENTERPRISES, MBE/WBE. This project is subject to Chapter 37-14.1 of the Rhode Island General Laws, and regulations promulgated there under, which require that ten percent of the dollar value of work performed by minority business enterprises.

Bidders shall be required to comply with the President's Executive Order No. 11246 and State of Rhode Island Executive Order No. 85-11, including any amendments or supplements relating thereto. The requirements of bidders and contractors under these orders are explained in the Contract Documents.

No bidder may withdraw his bid within ninety (90) days after the actual date of the opening thereof.

The Authority, being considered the sole and only judge, reserves the right to waive any informality in, or to reject, any and all bids, should the Authority deem it to be in the best interest of the public to do so.

Date: _____, 2024

WARWICK SEWER AUTHORITY

Executive Director

A pre-bid conference for prospective bidders will be held at XX am on ____ XX, 20XX at the office of:

The Warwick Sewer Authority
125 Arthur W. Devine Boulevard
Warwick, Rhode Island 02886

END OF SECTION

SECTION 00200

INFORMATION FOR BIDDERS

1. RECEIPT AND OPENING OF BIDS.

The City of Warwick, Rhode Island, acting herein through its Warwick Sewer Authority (hereinafter called the "Authority"), invites bids on the forms attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the WARWICK SEWER AUTHORITY, at the office of the Executive Director, 125 Arthur W. Devine Blvd. Warwick, Rhode Island, until 10:00 a.m. prevailing time on _____, 2024 and will be publicly opened and read aloud at 10:00 a.m. prevailing time at the office of the Sewer Authority, 125 Arthur W. Devine Blvd., Warwick, RI. The envelopes containing the bids must be sealed, addressed to the Warwick Sewer Authority at the Office of the Executive Director, 125 Arthur W. Devine Blvd. Warwick, Rhode Island, and designated as "BID: OAKLAND BEACH FORCE MAIN REHABILITATION, CONTRACT NO. XXX".

The Authority may consider informal any bid not prepared and submitted in accordance with the provision hereof and may waive any informalities in or reject any and all bids. Any bid may be withdrawn prior to the above-scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified will not be considered. No Bidder may withdraw a bid within 90 days after actual date of the opening thereof.

2. METHOD OF BIDDING.

The Authority invites a bid from qualified contractors for the construction of pressure sewers at the locations indicated in the Contract Documents, complete with all related street construction and miscellaneous work necessary to complete the project in accordance with the Plans and Specifications. Payment items for the above referenced work are Items 1 through 28, in the Schedule of Prices.

3. CONTENTS OF PROPOSAL FORMS.

The Proposal Forms are provided in the Specifications. The Proposal Form is furnished to the prospective bidder when said bidder obtains Plans and Specifications in accordance with the instructions set forth in the Notice to Contractors.

The Proposal Form consists of three parts. The first part, the "Preamble," outlines the various understandings and agreements required of the prospective bidder as conditions to its offer to perform the stated work. The second part, the "Bid Schedule," is that portion of the form where the various items of work are listed in a numbered sequence and where blank spaces are provided for the bidder to enter both the unit price and the total amount it desires to bid for each such item. The third part of the form is the "Signature Page." On this page the bidder enters its "Total, or Gross Sum of Bid" and signs the document. This signature signifies the bidder's acceptance of all requirements and conditions of the Contract and its agreement to substantially complete the work by a certain calendar date.

The Proposal Forms shall not be altered when the Proposal is submitted.

The Plans, Specifications and other Contract Documents designated in the Proposal Form will be considered a part of the Proposal whether attached or not.

Prospective bidders will be required to pay the Authority the sum stated in the Notice to Contractors for each set electronic copy of Contract Documents taken out by said bidders.

In the case of joint ventures, Proposal Forms may be taken out by each of the joint venturers or by the joint venture itself.

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4. INTERPRETATION OF QUANTITIES IN BID SCHEDULE.

The quantities listed in the bid (proposal) are approximate and are given only for use in comparing bids and to indicate approximately the total amount of the contract. The Authority does not expressly or by implication represent that the actual amounts of work will even approximately correspond therewith, but does call particular attention to the uncertainty in the quantities of the work involved which cannot be predicted in advance. The work under certain items may be materially greater or less than those given in the bid as may be necessary in the judgment of the Authority to complete the work contemplated in the contract. Attention is particularly called to the fact that the quantity of work to be done under some bid items may be largely dependent on subsurface ground conditions encountered, and therefore, the quantities of work to be done under the various items may vary substantially from the estimated quantities or may even be omitted.

Only such quantities of the respective items of work actually performed and accepted will be paid for. An increase or decrease in the quantity for any item shall not be regarded as grounds for an increase or decrease in the bid prices.

5. ITEMS NOT LISTED IN THE BID.

The bid items listed in the Proposal form are intended to cover all items of work to be done and materials and work to be furnished to fully complete the work in accordance with the contract documents. Appurtenant items of work shown on the Plans, specified or otherwise required, and parts of the work, materials and equipment not listed separately and not shown or specified but are, nevertheless, necessary to complete the work shall be provided and shall be considered as included in the cost of payment under the various applicable bid items of work. No separate payment will be made for such items. It shall be the responsibility of the Contractor to verify any missing or incomplete data.

6. EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS, AND SITE OF WORK.

The bidder is expected to carefully examine the site of the proposed work, the Proposal, the Plans, the Rhode Island Standard Specifications for Road and Bridge Construction, Supplemental Specifications, Special Provisions and Contract Forms before submitting a Proposal. The submission of a Proposal will be considered conclusive evidence that the bidder has made such an examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the Contract as defined in the Contract Documents. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to carry out the provision of his contract.

Insofar as possible the Contractor, in carrying out his work must employ such methods or means as will not cause any interruption of or interference with traffic, the use of existing facilities and utilities, or with the work being performed by others.

The bidder must satisfy himself by his own investigation as to the nature and location of the work, the general and local conditions, including those bearing upon underground pipes and structures, subsurface soil conditions and storage of materials, water, electric power, telephone, and other utilities, means of access, the construction and making of connections of the work to existing facilities, and all other conditions affecting the work to be done, and make his bid in sole reliance thereon, and shall not at any time after the submission of a bid assert that there was any misunderstanding in regards to the nature or amount of work to be done.

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It is understood that such information was obtained and used by the Engineer and Authority for design and estimating purposes only. It is made available to bidders so all have access to identical subsurface information available to the Engineer and Authority. Furthermore, this information is not intended as a substitute for personal investigation, interpretations, and judgment of the bidders.

The locations of all utilities as shown on the Plans are approximate. The Contractor shall seek to determine the exact location of all existing utilities, both underground and overhead, by notifying Dig Safe in accordance with State law. Damage to utilities which are shown on the Plans or located by the respective utilities in accordance with the Dig Safe process shall be the responsibility of the Contractor. Damage to utilities and their associated service connections which are not shown on the Plans or located by the respective utilities in accordance with the Dig Safe process, will be paid for by the Authority. Repair costs for damage to utilities and the associated service connections located by the respective utilities will be the responsibility of the Contractor.

The method of construction must be therefore compatible with this requirement of free access. Ground surface profiles have been drawn based on roadway centerlines. Ground elevations noted on drawings are obtained from profiles as drawn.

7. PREPARATION OF PROPOSAL.

The bidder shall submit its Proposal on the forms furnished by the Authority. **Bids shall be submitted in duplicate.** The bidder shall specify a unit price in words and figures, for each pay item for which a quantity is provided. The bidder shall show the products of the respective unit prices and quantities written in figures in the column provided for that purpose and the total amount of the Proposal obtained by adding the amounts of all items. All the words and figures shall be in ink or typed. The total bid price is to be based on the unit prices written in words, correctly extended and added. In case of a discrepancy between the unit prices written in words and those written in figures, the unit prices written in words shall govern. The Authority reserves other rights as noted in **Information for Bidder, Para. 22; Consideration of Proposals.**

When the Proposal contains a choice to be made by the bidder, the bidder shall indicate its choice in accordance with the instructions for that particular item. Thereafter, no further choice will be permitted.

All erasures or alterations shall be initialed by the signer in ink.

The bidder's attention is directed to the fact that joint ventures will be permitted for the purpose of bidding jointly on a project. If such bidding is made jointly, the Proposal shall be taken out in the name of the joint venture. A copy of the joint venture shall be included with the Proposal when submitted.

The bidder's Proposal must be signed in ink by an individual, by one or more members of the partnership, by one or more members or officers of each firm representing a joint venture, by one or more officers of a corporation, or by such other agent of the Contractor legally qualified and acceptable to the Authority as hereinafter provided.

If the Proposal is made by an individual, his/her name and mailing address shall be shown; by a partnership, the name and mailing address of each partnership member shall be shown; as a joint venture, the name and mailing address of each member or officer of the firms represented by the joint venture shall be shown; by a corporation, the name of the corporation and the business address of its corporate office shall be shown.

Bidders shall carefully execute all required certifications enumerated in the specifications which are located at the end of the Proposal Form.

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8. PROPOSAL GUARANTY (Payable to the "CITY OF WARWICK").

Each bid must be accompanied by a certified check of the bidder, or a bid bond duly executed by the bidder as principal and having as surety thereon a surety company approved by the Authority, in the amount of 10% of the total bid.

When the bidder is a joint venture, each party shall be named in the execution of the Proposal Guaranty made by the same thereon. If there is more than one surety to the Bid Bond, each surety shall be named and execution made by same thereon.

Execution of the Bid Bonds will not be considered complete unless accompanied by a certified copy of the power of attorney for the surety's attorney-in-act.

9. ADDENDA AND INTERPRETATIONS.

No interpretation of the meaning of the Plans, Specifications or other pre-bid documents will be made to any bidder orally.

Every request for such interpretation should be in writing addressed to Warwick Sewer Authority, 125 Arthur W. Devine Blvd., Warwick, Rhode Island 02886, and to be given consideration must be received at least seven days prior to the date fixed for the opening of bids.

Any and all such interpretations and any supplemental instructions will be in the form of written Addenda to the Specifications which, if issued, will be mailed by certified mail with return receipt requested to all prospective bidders (at the respective addresses furnished for such purposes), not later than three days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All Addenda so issued shall become part of the Contract Documents.

10. BIDDERS TO ACKNOWLEDGE ADDENDA.

Bidders are required to acknowledge receipt of all addenda to the Specifications on the Proposal in the space provided. Failure to acknowledge all Addenda may cause the bid to be considered not responsive to the Notice to Contractors, which would require rejection of the bid.

11. BIDDERS TO SUBMIT NAMES OF SUBCONTRACTORS.

Bidders are required to submit the names and trade of the subcontractors they propose to use on items not performed by the prime contractor. The subcontractors are to be listed on the form provided in the proposal. Failure to name the subcontractors in the form provided will require rejection of the bid.

12. SUBCONTRACTS.

The bidder is specifically advised that any person, firm, or other party to whom it is proposed to award a subcontract under this contract must be acceptable to the City of Warwick, Rhode Island.

13. DELIVERY OF PROPOSALS.

Each bid must be submitted in duplicate, in a sealed envelope bearing on the outside the name of the bidder, his address, and the name of the project for which the bid is submitted. The envelope should be clearly labeled "BID DOCUMENTS". If forwarded by mail, the sealed envelope containing the bid documents must be enclosed in another envelope addressed as specified above.

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14. WITHDRAWAL OR REVISION OF PROPOSALS.

A bidder may withdraw or revise a Proposal after it has been deposited with the Authority, provided the request for such withdrawal or revision is received by the Authority, in writing or by telegram, not later than two (2) hours before the time set for opening proposals. Upon presentation of its written request at the proper time, a bidder's Proposal will be returned unopened. If a Proposal is withdrawn in accordance with this provision, the proposal guaranty shall be returned to the bidder.

Whether or not Proposals are opened exactly at the time set for such opening, a Proposal will not be received, nor may any be withdrawn, after the time set for the opening of Proposals.

The Authority reserves the right to revise the Plans, Specifications, other Contract Documents, the Proposal, and bid opening date for any project at any time prior to the time set for opening of Proposals. Such revisions will be made by addendum, duly numbered and dated, and delivered to bidders by Certified Mail, Return Receipt Requested.

15. COMBINATION OR CONDITIONAL PROPOSALS.

If the Authority so elects, Proposals may be issued for projects in combination or separately, so that Proposals may be submitted either on the combination or on separate units of the combination. The Authority reserves the right to make awards on combination bids or separate bids to the advantage of the Authority. No combination of Proposals, other than those as specified by the Authority, will be considered. Separate contracts will be written for each individual project included in the combination.

Conditional proposals will be considered only when specified in the Contract Documents.

16. PUBLIC OPENING OF PROPOSALS.

Proposals will be opened and read publicly at the time and place indicated in the Notice to Contractors or as amended by duly authorized Contract Addenda. Bidders, their authorized agents, and other interested parties are invited to be present at the opening of Proposals.

17. DISQUALIFICATION OF BIDDERS AND REJECTION OF PROPOSALS.

- a. **Mandatory Reasons for Disqualification.** The Authority will declare a Proposal unresponsive and shall disqualify a bidder for any of the following reasons:
1. If the Proposal Form is obtained from any party other than the Authority. (Proposal Forms are non-transferable.);
 2. If the Proposal is on a form other than that furnished by the Authority; or if the form is altered or any part thereof is detached or incomplete;
 3. If there are unauthorized additions, unauthorized conditional or alternate bids, or irregularities of any kind which may tend to make the Proposal incomplete, indefinite, or ambiguous as to its meaning;
 4. If the bidder adds any provisions reserving the right to accept or reject an award;
 5. If the Proposal does not contain a unit price for each pay item listed (except in the case of authorized alternative pay items);
 6. If the Proposal is not completed in ink or typed;

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7. If the Authority determines that the low bid is both mathematically and materially unbalanced; refer to **Information for Bidders, Para. 19; Balanced Bids**;
 8. If the Proposal is received after the time designated for the opening of bids;
 9. If the bidder fails to execute the required certifications of the bidding requirements located at the end of the Proposal;
 10. If the bidder fails to submit an original Bid Bond, properly executed;
 11. More than one Proposal for the same work from an individual, partnership, corporation or joint venture under the same or different name;
 12. Evidence of collusion among bidders. Participants in such collusion will not be considered for future proposals until requalified by the Authority;
 13. The making of false statements on prequalification documents and/or other required bidder's certifications;
 14. Failure to comply with any prequalification requirements;
 15. Debarment by Federal or State authorities; or
 16. Failure to provide a properly executed Contract Bond.
- b. Other Reasons for Disqualification.** The Authority reserves the right to declare a Proposal unresponsive and may disqualify a bidder for any of the following reasons:
1. Lack of competency and adequate machinery, plant and other equipment, refer to **Information for Bidders, Para. 18; Bidders Qualifications**;
 2. Lack of experience and work on similar types of projects, refer to **Information for Bidders, Para. 18; Bidders Qualifications**;
 3. Uncompleted work under Contract which, in the judgment of the Authority, might hinder or prevent the prompt completion of additional work, if awarded;
 4. Failure to pay, or satisfactorily settle, all bills due for labor and material on Contracts in force with the Authority at the time of the issuance of Proposals;
 5. Failure to comply with any post qualification regulations or requirements of the Authority;
 6. Default under previous contracts;
 7. Unsatisfactory performance on a previously awarded contract;
 8. Failure to reimburse the Authority for monies owed on any previously awarded contracts including those where the prospective bidder is a party to a joint venture and the joint venture has failed to reimburse the Authority for monies owed.

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9. If the bidder fails to include at least a minimum amount where required for a particular item;
10. If the Proposal does not contain a "total or gross sum of bid", written in words and figures, in the space provided;
11. If the Proposal is not properly signed;
12. If the bidder fails to comply in every detail with the instructions provided in **Information for Bidders, Para. 7; Preparation of Proposal;**
13. If the Proposal is not submitted in a sealed envelope and clearly labeled as to its contents;
14. If erasures or alterations in the bidder's entries thereon are not appropriately initialed.

18. BIDDERS QUALIFICATIONS.

- a. **General.** The Authority may make such investigations as it seems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Authority all such information and data for this purpose as the Authority may request. The Authority reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Authority.
- b. **Determination of the Lowest Responsible Bidder.** In determining the lowest responsible bidder, the Authority, in accordance with Section 6-12 of the Warwick City Charter, shall consider for following:
 1. The ability, capacity and skill of the bidder to perform the contract or provide the service required.
 2. Whether the bidder can perform the contract or provide the service promptly, or within the time specified, without delay or interference.
 3. The character, integrity, reputation, judgment, experience and efficiency of the bidder.
 4. The quality of performance of previous contracts or services.
 5. The previous and existing compliance by the bidder with laws and ordinances relating to the contract or service.
 6. The sufficiency of the financial resources and ability of the bidder to perform the contract or provide the service.
 7. The quality, availability and adaptability of the supplies or contractual services to the particular use required.
 8. The ability of the bidder to provide the future maintenance and service for the use of the subject of the contracts.

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When a bid is awarded to other than the lowest bid, a full and complete statement of the reasons for such action shall be prepared, maintained, and placed on the public record.

The Authority's decision or judgment on these matters will be final, conclusive, and binding.

19. BALANCED BIDDING.

Bids should be made on each separate item of work shown in the bid (Schedule of Prices) with reasonable relation to the probable cost of doing the work included in such items. A bidder shall state the proposed price for the work which price is to cover all the expenses incidental to the completion of the work in full conformity with the contract. Specifications, and Drawings. The right is reserved by the Authority to reject wholly any bid in case an item or items thereof are obviously unbalanced or appear to the Authority to be so unbalanced as to affect or to be liable to affect adversely any interests of the Authority. **The attention of the bidder is called to the fact that unbalancing of bids may adversely affect the Contractor if certain items of the work are omitted as provided in the Contract Documents.**

20. MATERIAL GUARANTY.

The successful bidder may be required to furnish a complete statement of the origin, composition, and manufacture of any or all materials to be used in the construction of the work, together with samples to be tested for conformance with Contract provisions.

21. NON-COLLUSIVE BIDDING.

The bidder shall not participate in any act of collusion to restrict competition. To the best of the bidder's knowledge and belief, the bidder shall conform to the following:

- a. The prices in this Proposal have been arrived at independently without collusion, consultation, communication, or agreement with any other bidder or with any competitor for the purpose of restricting competition.
- b. Unless required by law, the prices which have been quoted in this Proposal have not been knowingly disclosed and will not knowingly be disclosed by the bidder, directly or indirectly, to any other bidder or competitor prior to opening of Proposals.
- c. No attempt has been made or will be made by the bidder to induce any other person, partnership, or corporation to submit or not to submit a proposal for the purpose of restricting competition.

22. CONSIDERATION OF PROPOSALS.

After the Proposals are opened and read, they will be compared on the basis of the summation of the products of the estimated quantities shown in the Proposal by the respective unit bid prices. The results of such comparisons will be made available to the public.

The Authority reserves the right to correct arithmetic errors in the Proposals prior to comparison of said Proposals. In the event of a discrepancy between unit bid prices and extensions, the unit bid price shall govern.

The Authority reserves the right to reject any or all Proposals, to waive technicalities or to advertise for new Proposals.

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23. POST-QUALIFICATION REQUIREMENTS AND AWARD OF CONTRACT.

- a. **Submission of Post Qualification Requirements.** All post qualification requirements shall be submitted as specified in the Contract Documents. This includes, but is not limited to, all documentation and requirements referenced under **Special Conditions, Minority Requirements and Labor Standards.**
- b. **Financial Statements.** The successful bidder will be required to submit a complete set of audited financial statements certified by a Certified Public Accountant (CPA).
- c. **Award of Contract.** Contract award, if it be awarded, will be made within sixty (60) calendar days following the opening of Proposals, or within the time specified in the Notice to Contractors, to the lowest responsible and qualified bidder who submits the lowest responsive Proposal. However, the Authority may reject any and all bids if it is in the public interest to do so, or **the Authority may reduce the value of the contract awarded by deleting one or more items of work listed in the Proposal.**

The successful bidder will first receive a Notice of Tentative Award. This written communication will indicate the conditional intention of the Authority to award the Contract and instruct the successful bidder to arrange for the execution of the Contract Agreement and Contract Bond and for the delivery of the Certificates of Insurance, all as hereinafter provided.

On Contracts jointly bid, Contractors will be held jointly and severally liable for the entire Contract.

Corporate bidders must furnish documentary evidence that they have met all legal requirements to transact business in the State of Rhode Island as a condition precedent to approval of the Contract.

24. CANCELLATION OF AWARD.

The Authority reserves the right to cancel the award of any Contract before the execution thereof by all parties without any liability against the Authority.

25. RETURN OF PROPOSAL GUARANTY.

The Authority reserves the right to retain the surety of all bidders until either the successful bidder enters into the Contract or until such time as the award or cancellation of the Contract is announced. At this point sureties will be returned to all bidders.

A Contractor will not be released from the bidding obligation because of an alleged error in the preparation of the Proposal unless the Authority returns the Contractor's Proposal Guaranty.

26. CONTRACT BOND.

At the time of the execution of the Contract, the successful bidder shall furnish a Contract Bond in a sum equal to the full amount of the Contract. The Contract Bond shall guarantee the following; complete performance of the Contract; full payment for all materials and equipment; and full payment of all wages of labor.

The form of the Contract Bond shall be acceptable to the Authority. In the event the surety fails or becomes financially insolvent, the successful bidder shall file a new Bond in the amount designated by the Authority within thirty (30) days of such failures or insolvency.

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The Bond submitted to the Authority shall be provided by a surety both acceptable to the Authority and licensed and authorized to conduct business in the State of Rhode Island. Subsequent to award of Contract, the Authority may call for additional security as required. Changes, additions, and modifications to the Contract may be made without the consent of surety.

27. EXECUTION AND APPROVAL OF THE CONTRACT.

The Contract shall be executed by the successful bidder, hereinafter referred to as the Contractor, in accordance with the instructions contained in the Notice of Tentative Award. At the specified time and place, the Contractor shall deliver the Contract Bond and required Certificates of Insurance, execute the Contract Agreement, and comply with all other stipulations set forth in said notice.

Receipt by the Contractor of the executed Contract Agreement constitutes the official "Award" of the Contract.

The Contract execution date may be extended by mutual agreement of the Authority and the successful bidder.

28. FAILURE TO EXECUTE CONTRACT.

- a. **Failure of Authority to Execute Contract.** If the Contract is not executed by the Authority within thirty (30) calendar days following execution of the Contract Agreement and Bond by the Contractor, said Contractor shall have the right to withdraw its Proposal without penalty.
- b. **Failure of the Bidder to Execute Contract.** Failure of the successful bidder to execute the Contract Agreement and Contract Bond, deliver the required Certificates of Insurance; and comply with other stipulations within fifteen (15) calendar days of receipt of the Notice of Tentative Award shall be considered revocation of said notice and require forfeiture of the Proposal Guaranty to the Authority. Such forfeiture shall not be considered a penalty, but rather a liquidation of damages sustained by the Authority.

Furthermore, the Authority will not issue or receive subsequent proposals for construction work from a bidder who fails to execute a Contract until said bidder demonstrates its ability to obtain the necessary bonding and insurance coverage to the complete satisfaction of the Authority.

In the event a Contract is not executed with the first-designated responsible bidder, the Authority may either award the Contract to the next lowest responsible bidder or reject all bids and re-advertise the Project for the purpose of soliciting new Proposals.

29. TIME OF COMPLETION AND LIQUIDATED DAMAGES.

The bidder must agree to commence work on or before a date to be specified in a written "Notice to Proceed" by the Authority and to fully complete the project within the number of consecutive calendar days thereafter as set forth in the "Notice to Contractors." The bidder must agree also to pay as liquidated damages, the sum of \$2,500.00 for each consecutive calendar day thereafter as hereinafter provided in the General Requirements.

30. NOTICE OF SPECIAL CONDITIONS.

Attention is particularly called to those parts of the Contract Documents and Specifications which deal with the following:

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- a. Inspection and testing of materials
- b. Insurance requirements
- c. Wage rates and working conditions
- d. Interpretation of Drawings and Specifications
- e. Special requirements for work within privately owned and State-owned property
- f. The use of explosives
- g. Safety and Health Regulations
- h. Minority Contract Requirements.

31. LAWS AND REGULATIONS.

The bidder's attention is directed to the fact that ALL applicable Federal and State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction, reconstruction, alteration, remodeling, repair or demolition shall apply to this contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full. A copy of RIGL, Title 37 Chapter 13, Labor and Payment of Debts by Contractors, is included in these Contract Documents for reference.

32. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA).

The Contractor is to comply with all regulations of OSHA when applicable.

33. WORK ON STATE, MUNICIPAL AND PRIVATE PROPERTY.

Particular attention is hereby directed to the fact that portions of the work included under this contract may be done within the limits of properties that are State owned, municipally owned, and privately owned. The Contractor shall be responsible for coordinating the prosecution of the work of this contract with the various property owners.

34. NONDISCRIMINATION IN EMPLOYMENT.

Contractors for work under this bid (proposal) will obligate the contractors and subcontractors not to discriminate in employment practices. Bidders must, when requested, submit a compliance report concerning their employment practices and policies in order to maintain their eligibility to receive the award of the contract. The bidder must execute and post a Notice of NON-DISCRIMINATION IN EMPLOYMENT in accordance with Executive Order 11246. A notice form is included with the Contract Documents.

35. PRECONSTRUCTION CONFERENCE.

The Contractor shall be prepared to attend a preconstruction conference scheduled by the Authority after award of the Contract, but prior to the actual commencement of work at the site. The main items of discussion will be the Contractor's construction schedule, proposed Superintendent, Professional Engineer or Land Surveyor employed for layout of the work, to review the written outline of compaction methods prepared and submitted by the Contractor and record drawings, etc.

36. LOCAL WAGE RATES.

Local wage rates apply to this project. It is the responsibility of the Contractor before bid openings to request, if necessary, any additional information on local Wage Rates for those trades-people who are not covered by the applicable local Wage Decision, but who may be employed for the proposed work under this Contract.

SECTION 00200

37. MINORITY REQUIREMENTS.

The Warwick Sewer Authority is requiring a minority participation goal of not less than 10 percent of the contract bid price to the Contractor's subcontractors, and/or suppliers which qualify as disadvantaged business enterprises, MBE/WBE.

38. WINTER SHUTDOWN.

The Contractor shall be required to terminate work between December 15th and March 15th for a winter shutdown. Work will only be allowed to continue during this period if written permission is requested by the Contractor and approved in writing by the Warwick Sewer Authority. The winter shutdown shall not extend the number of contract days, and shall be included as part of the consecutive calendar days of the contract.

39. CONSTRUCTION PERMITS.

The Contractor shall be responsible for preparing, submitting, coordinating, and obtaining all construction permits with the City of Warwick and State of Rhode Island including any required environmental permits with the Rhode Island Department of Environmental Management. The Contractor shall not be reimbursed for preparing, submitting, coordinating, or obtaining construction permits.

END OF SECTION

SECTION 00410

BID PROPOSAL

PLACE _____

DATE _____

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

To the Warwick Sewer Authority acting herein through its Board of Contract and Supply
(hereinafter called the "Authority").

Gentlemen:

THE BIDDER, in compliance with your **Notice to Contractors** for **OAKLAND BEACH FORCE
MAIN REHABILITATION, CONTRACT NO. XXX** for the City of Warwick, Rhode Island, having
examined the Plans and Specifications with related documents and the site of the proposed work
and being familiar with all of the conditions surrounding the construction of the proposed project
including the availability of materials and labor, hereby proposes to furnish all labor, materials
supplies, supervision and anything else required or necessary in order to construct the project in
accordance with the Contract Documents and in accordance with the prices stated in the Schedule
of Prices. This Bid is accordingly submitted in the sum of

_____ Dollars (\$_____). This price covers all costs of
performing the work required under the Contract Documents of which this Proposal is a part.

Bidder hereby agrees to commence work under this contract on or before a date to be specified in
a written "Notice to Proceed" by the Authority and to fully complete the project within 365
consecutive calendar days thereafter as stipulated in the Specifications. Bidder further agrees to
pay as liquidated damages, the sum of \$2,500.00 for each consecutive calendar day thereafter as
hereinafter provided in the General Conditions.

Bidder acknowledges receipt of the following addenda:

SECTION 00410

BID PROPOSAL

THE CONTRACTOR AGREES TO ACCEPT THE FOLLOWING RESTRICTIONS ON PRICES FOR THE SPECIFIC ITEMS LISTED BELOW.

Item 1 SITE PREPARATION: The lump sum amount for site preparation shall not exceed 5% of the total contract price for Items 2 through 28.

Item 2 ROCK EXCAVATION: The minimum acceptable unit price per cubic yard for rock excavation encountered, removed, and disposed of, including refill with suitable materials, all as specified, shall be One Hundred and 00/100 dollars (\$100.00) per cubic yard.

Item 3 MISC. EARTH EXCAVATION: The minimum acceptable unit price per cubic yard for miscellaneous earth excavation, and disposed of, including refill with suitable materials, all as specified, shall be Ten and 00/100 dollars (\$10.00) per cubic yard.

Item 4 EARTH EXCAVATION BELOW GRADE: The minimum acceptable unit price per cubic yard for earth excavation below grade, and disposed of, including refill with suitable materials, all as specified, shall be Ten and 00/100 dollars (\$10.00) per cubic yard.

Item 5 ADDITIONAL SELECTED MATERIAL: The minimum acceptable unit price per cubic yard for additional select material, all as specified, shall be Twelve and 00/100 dollars (\$12.00) per cubic yard.

Item 6 CALCIUM CHLORIDE FOR DUST CONTROL: The minimum acceptable unit price for each pound of calcium chloride furnished and placed as ordered by the Authority, as specified, shall be Zero and 25/100 dollars (\$0.25) per pound.

Item 7 ADDITIONAL GRAVEL BORROW: The minimum acceptable unit price per cubic yard for additional gravel borrow, all as specified, shall be Seven and 50/100 dollars (\$7.50) per cubic yard.

Item 18 CAST IN PLACE CONCRETE: The minimum acceptable unit price per cubic yard for cast in place concrete, all as specified, shall be One Hundred and 00/100 dollars (\$100.00) per cubic yard.

Item 19 COMPOST FILTER SOCK: The minimum acceptable unit price per linear foot of compost filter sock furnished and placed for erosion control, where ordered by Authority, shall be Four and 00/100 dollars (\$4.00) per linear foot.

Item 21 SOIL COMPACTION TESTING: The only acceptable unit price per lump sum of soil compaction testing work, all as specified, shall be Six Thousand and 00/100 dollars (\$6,000.00).

Item 25 TREE TRIMMING: The only acceptable unit price per lump sum of tree trimming work, all as specified, shall be Seven Thousand Five Hundred Dollars and 00/100 dollars (\$7,500.00).

Item 27 MISCELLANEOUS UTILITY RELOCATION: The only acceptable unit price per lump sum of miscellaneous utility relocation, all as specified, shall be One Hundred and Fifty Thousand Dollars and 00/100 dollars (\$150,000.00).

SECTION 00410

Item 28 FULL TRENCH REPLACEMENT OF FORCE MAIN: The only acceptable unit price per lump sum of full trench replacement of force main, all as specified, shall be Five Hundred Thousand Dollars and 00/100 dollars (\$500,000.00).

The Bidder understands that the Authority reserves the right to reject any or all bids and to waive any informalities in the bidding in accordance with RIGL 37 13 2.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 30 calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this bid the Bidder shall execute the formal Contract attached within 10 days and deliver a Surety Bond or Bonds as required in the General Conditions. The Bid Security attached in the sum of

_____ Dollars (\$_____) is to become the property of the Authority in the event the Contract and Bond are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the Authority caused thereby.

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

ALTERNATES

The Warwick Sewer Authority reserves the right to include one or more alternates identified herein to/from the scope of the project; provided, however, that said alternates shall only be selected by the Warwick Sewer Authority in the order in which they are listed. Bidders are required to submit a bid price for each and every alternate. Failure to submit a bid price for each and every alternate will result in the entire proposal being deemed to be nonresponsive to the solicitation.

Alternates are listed in numerical sequence in order of Warwick Sewer Authority's priority. In determining the lowest responsive bid, the awarding authority shall consider alternates in descending numerical sequence such that no individual alternate shall be considered until every alternate preceding it on the list has been added to the base bid price.

Bidder understands that the Warwick Sewer Authority reserves the right to reject any and all bids, and to waive any irregularities in the bidding and accept the bid, with or without alternates, as deemed to be in the best interest of the Warwick Sewer Authority.

SECTION 00410

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 Occupations Safety and Health Act of 1970, Public Law 91 596.
- (2) Part 1910 Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations.
- (3) Part 1518 Safety and Health Requirements for Construction, Chapter XIII of Title 29, Code of Federal Regulations.
- (4) Executive Law 11246 as amended by Executive Order 11376 and as supplemented in DOL regulations (41 CFR Part 60).
- (5) Copeland Anti Kick Back Act (18 U.S.C. 874) as supplemented in DOL regulations (29 CFR Part 3).
- (6) Davis Bacon Act (40 U.S.C. 276 (a) to (a) 7) as supplemented in DOL regulations (29 CFR Part 5).
- (7) Section 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327 330) as supplemented by DOL regulations (29 CFR Part 5).
- (8) Clean Air Act of 1970, as amended, P.L. 91 604.

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

Respectfully submitted,

*

By:

Title: _____

Business Address: _____

Seal, if bid is by Corporation

SECTION 00410

* Note: Insert Bidder's name. If a Corporation, fill in the following: "A corporation organized under the laws of _____, composed of officer as follows:

President

Vice President

Secretary

Treasurer

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

_____ held on _____
(Name of Corporation) (Date)

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

_____ is _____
(Name) (Officer)

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

(Officer)

shall be valid and binding upon this company.

A true copy

ATTEST: _____
(Clerk)

Place of Business: _____

I hereby certify that I am the Clerk of the _____
_____, that _____

is the duly elected _____ of said Company, and that the above vote has not been amended or rescinded and remains in full force and effect as of the date of this contract.

Corporate Seal

SECTION 00410

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

PROPOSED SUBCONTRACTORS

If none, write "None" _____ and sign below.

*Description of Work _____

Proposed Subcontractor, Name _____

Address _____

*Description of Work _____

Proposed Subcontractor, Name _____

Address _____

*Description of Work _____

Proposed Subcontractor, Name _____

Address _____

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

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

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

Bidder _____
(name)

By _____
(signature & title)

SECTION 00410

BID BOND

KNOW ALL MEN BY THESE PRESENTS, THAT WE, THE UNDERSIGNED, _____

_____, as Principal, and

_____, as Surety, are hereby held and firmly bound unto the City of Warwick, a municipality in Kent County and State of Rhode Island, in the penal sum of _____ Dollars (\$ _____), for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns. Signed, this _____ day of _____, 20 ____.

THE CONDITION OF THE ABOVE OBLIGATION is such that whereas the Principal has submitted to the City of Warwick, Rhode Island, acting herein through its Warwick Sewer Authority, a certain bid attached hereto and hereby made a part hereof to enter into a contract in writing for **OAKLAND BEACH FORCE MAIN REHABILITATION, CONTRACT NO. XXX**

NOW, THEREFORE,

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

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

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

SEAL

Principal

BY: _____

(Surety)

**SCHEDULE OF PRICES
OAKLAND BEACH FORCE MAIN REHABILITATION**

Item No.	Pmt. Para. 02000	Approx. Quantity	Unit Measure	Items w/Unit Bid Prices Written in Words	Unit Bid \$ Price	Amount \$ Bid
The Bidder agrees to perform all the construction work described in the CONTRACT DOCUMENTS, for the following unit and lump sum prices. BIDS shall include applicable fees.						
1		1	L.S.	Site Preparation		
				At _____	Per L.S.	_____
2		5	C.Y.	Rock Excavation		
				At _____	Per C.Y.	_____
3		250	C.Y.	Misc. Earth Excavation		
				At _____	Per C.Y.	_____
4		250	C.Y.	Earth Excavation below Grade		
				At _____	Per C.Y.	_____
5		250	C.Y.	Additional Selected Material		
				At _____	Per C.Y.	_____
6		2,000	LB	Calcium Chloride		
				At _____	Per LB	_____
7		400	C.Y.	Additional Gravel Borrow		
				At _____	Per C.Y.	_____
8		1	L.S.	Phased Temporary Bypass Operations		
				At _____	Per L.S.	_____
9		8,373	L.F.	Existing Force Main Cleaning		
				At _____	Per L.F.	_____
10		8,373	L.F.	Existing Force Main CCTV		
				At _____	Per L.F.	_____
11		8,373	L.F.	12" Cured-In-Place Structural Pipe Liner		
				At _____	Per L.F.	_____
12		14	EACH	Access Point Modifications to Existing Manholes		
				At _____	Per EACH	_____
13		28	V.L.F.	Sewer Manhole Structures		
				At _____	Per V.L.F.	_____

**SCHEDULE OF PRICES
OAKLAND BEACH FORCE MAIN REHABILITATION**

Item No.	Pmt. Para. 02000	Approx. Quantity	Unit Measure	Items w/Unit Bid Prices Written in Words	Unit Bid \$ Price	Amount \$ Bid
The Bidder agrees to perform all the construction work described in the CONTRACT DOCUMENTS, for the following unit and lump sum prices. BIDS shall include applicable fees.						
14		179	S.Y.	Cold Planing (Curb to Curb at Access Points Per State Regulations)		
				At _____ Per S.Y.	_____	_____
15		25	TON	2" Pavement Patch Class 9.5 HMA		
				At _____ Per TON	_____	_____
16		56	TON	1" Leveling Course Class 9.5 HMA		
				At _____ Per TON	_____	_____
17		83	TON	1-1/2" Permanent Pavement Overlay Class 9.5 HMA		
				At _____ Per TON	_____	_____
18		146	C.Y.	Cast in Place Concrete		
				At _____ Per C.Y.	_____	_____
19		300	L.F.	Compost Filter Sock		
				At _____ Per L.F.	_____	_____
20		30	EACH	Silt Sack Sediment Trap		
				At _____ Per EACH	_____	_____
21		1	L.S.	Soil Compaction Testing (Allowance)		
				At Six Thousand Dollars Per L.S.	\$6,000	\$6,000
22		450	S.F.	Construction Road Signs		
				At _____ Per S.F.	_____	_____
23		3,600	BDAY	Traffic Barrels w/ Type A or Type C Light		
				At _____ Per BDAY	_____	_____
24		15	EACH	Traffic Barricades		
				At _____ Per EACH	_____	_____
25		1	L.S.	Tree Trimming (Allowance)		
				At Seven Thousand Five Hundred Dollars Per L.S.	\$7,500	\$7,500

**SCHEDULE OF PRICES
OAKLAND BEACH FORCE MAIN REHABILITATION**

Item No.	Pmt. Para. 02000	Approx. Quantity	Unit Measure	Items w/Unit Bid Prices Written in Words	Unit Bid \$ Price	Amount \$ Bid
The Bidder agrees to perform all the construction work described in the CONTRACT DOCUMENTS, for the following unit and lump sum prices. BIDS shall include applicable fees.						
26		1	L.S.	Police Protection Allowance (Paid by Warwick Sewer Authority)		
				At <u>Two Hundred Thousand Dollars</u> Per L.S.	<u>\$200,000</u>	<u>\$200,000</u>
27		1	L.S.	Miscellaneous Utility Relocation (Allowance)		
				At <u>One Hundred and Fifty Thousand Dollars</u> Per L.S.	<u>\$150,000</u>	<u>\$150,000</u>
28		1	L.S.	Full Trench Replacement of Force Main (Allowance)		
				At <u>Five Hundred Thousand Dollars</u> Per L.S.	<u>\$500,000</u>	<u>\$500,000</u>
TOTAL BID WRITTEN IN WORDS:						
_____						\$
(Written)						

ALTERNATE BID 1 - Single Phase Temporary Bypass Operations						
<i>Alternate Bid 1 shall provide a separate project costing alternative for a single-phased temporary bypass approach. Base Bid Item 8 shall be removed and replaced in its entirety with Bid Item 29 'Single-Phase Temporary Bypass Operations', and shall be priced by lump sum in conformance with all requirements of Section 02600 of the Project Specifications.</i>						
8		1	L.S.	Phased Temporary Bypass Operations (REMOVE)		
				At _____ Per L.S.		
29		1	L.S.	Single-Phase Temporary Bypass Operations (ADD)		
				At _____ Per L.S.		
TOTAL BID WRITTEN IN WORDS:						
_____						\$
(Written)						

CONTRACT

THIS AGREEMENT, made this _____ day of _____, by and between the City of Warwick, Rhode Island, acting herein through its Warwick Sewer Authority hereinafter

called "Authority", and _____.

doing business as (an individual), or (a partnership), or (a corporation), _____

hereinafter called "Contractor."

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

1. The Contractor will commence and complete OAKLAND BEACH FORCE MAIN REHABILITATION, **CONTRACT NO. XXX**

2. The Contractor will furnish all of the material, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the Project described herein.

3. The Contractor will commence the work required by the Contract Documents on or before a date to be specified in a written Notice to Proceed, and will fully complete the Project within 120 calendar days unless the period for completion is extended otherwise by the Contract Documents. Contractor further agrees to pay as liquidated damages, the sum of \$2,500.00 for each consecutive calendar day thereafter as provided in the General Conditions.

4. The Contractor agrees to perform all of the work described in the Contract Documents, and comply with the terms therein for the sum of _____ Dollars, and as shown in the Schedule of Prices.

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

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

CERTIFICATE OF AUTHORITY'S ATTORNEY

I, the undersigned, _____, the duly authorized and

acting legal representative of the _____ acting herein through its

_____, do hereby certify as follows:

I have examined the foregoing contract and surety bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with the terms, conditions, and provisions thereof.

By: _____
(Signature)

Date: _____

(Name)

(Title)

(Address)

(City, State, Postal Code)

PERFORMANCE BOND

(NOTE: This Bond is issued simultaneously with the attached Labor and Materials Bond in favor of the Authority.)

KNOW ALL MEN BY THESE PRESENTS:

That we, _____
(An individual, a partnership, a corporation)

duly organized under the Laws of the State (or Commonwealth) of _____,
and having a usual place of business at _____,

_____.

as Principal, and _____, a corporation duly organized under the
Laws

of the State (or Commonwealth) of _____, and duly
authorized

to do business in the State (or Commonwealth) of _____, and
having

a usual place of business at _____ as Surety, are holden and
stand firmly bound and obligated unto **City of Warwick, Rhode Island**, as obligee, in
the sum of:

lawful money of the United States of America, to and for the true payment whereof we
bind ourselves and, each of us, our heirs, executors, administrators, successors, and
assigns, Jointly and severally, firmly by these presents.

WHEREAS, the Principal, by means of a written AGREEMENT (which together with the
Contract Documents in said AGREEMENT referred to are collectively sometimes
referred to as the "Contract") dated _____ has entered into a contract with the
said obligee for Oakland Beach Force Main Rehabilitation, **Contract No. XXX** in the **City
of Warwick, Rhode Island**, a copy of which agreement is attached hereto and by
references made a part hereof.

NOW THEREFORE, THE CONDITION of this obligation is such that if the Principal shall
well and truly keep and fully and faithfully perform all of the terms and conditions of said
AGREEMENT and of the "Contract Documents" referred to in said AGREEMENT (which
collectively are hereinafter and in said AGREEMENT sometimes referred to as the
"Contract") and all modifications thereof on the Principal's part to be performed, this
obligation shall be void; otherwise it shall remain in full force and effect.

Whenever the said Principal shall be, and declared by the Authority to be, in default
under the said Contract, the Authority having performed its obligations thereunder,

Surety, for value received, shall promptly remedy the default, or, at the option of the Authority, shall promptly.

1. Complete the said AGREEMENT and/or Contract in accordance with its terms and conditions, or
2. Obtain a bid or bids for submission to and the approval of the Authority for completing the said AGREEMENT and/or Contract and any modifications thereof in accordance with the terms and conditions thereof, and upon determination by the Authority and the Surety of the lowest responsible and acceptable bidder, arrange for a contract between such bidder and the Authority, and make available to the Authority as the work progresses (even though there should be default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less a sum that shall be equal to the difference between the Contract price as fixed and provided in said AGREEMENT and/or Contract or any modifications thereof to be paid thereunder to the Principal and the amount previously paid by the Authority to and/or for the account of and/or chargeable against the Principal, but not exceeding (including other costs and damages for which the Surety may be liable hereunder) the amount set forth in the first paragraph hereof.

The Surety, for value received, agrees further that no changes in, omissions from, or alterations, modifications or additions to the terms and provisions of said AGREEMENT and/or Contract or the Work to be performed thereunder, and that no extensions of time given or changes made in the manner or time of making payments thereunder, shall in any way effect the Surety's obligations on this bond, and the Surety hereby waives notice of any such changes, omissions, alterations, modifications, additions or extensions.

No right of action shall accrue on this Bond to or for the use of any persons other than the Authority named herein or the heirs, executors, administrators, successors and assigns of the Authority.

IN WITNESS WHEREOF, we have hereunto set our hands and seals to _____

counterparts of this bond, this _____ day of _____, in the year Two

Thousand _____.

_____(SEAL)
Principal

_____(SEAL)
Principal

_____(SEAL)
Surety

_____(SEAL)
Surety

NOTE:

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized officer or officers.

If this Bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his power of attorney showing his authority to sign such Bonds.

There should be executed an appropriate number of counterparts of the Bond corresponding to the number of counterparts of the AGREEMENT.

Date of Bond must not be prior to the date of Contract.

Important

Surety Companies executing BONDS must appear on the U.S. Treasury Department's most current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts and be authorized to transact business in the state where the PROJECT is located.

The attention of the Surety Companies and Principal executing this Performance Bond is directed to the fact that said Bond shall remain in full effect throughout the life of any guaranty or warranty periods stipulated in the Contract Documents and/or Agreement.

LABOR AND MATERIALS BOND

(NOTE: This Bond is issued simultaneously with the attached Performance Bond in favor of the Authority.)

KNOW ALL MEN BY THESE PRESENTS:

That we, _____
An individual, a partnership, a corporation)

duly organized under the Laws of the State (or Commonwealth) of _____,

and having a usual place of business at _____,

as Principal, and _____, a corporation duly organized under the Laws

of the State (or Commonwealth) of _____, and duly authorized

to do business in the State (or Commonwealth) of _____, and having

a usual place of business at _____ as Surety, are holden and stand firmly bound and obligated unto **City of Warwick, Rhode Island**, as obligee, in the sum of:

lawful money of the United States of America, to and for the true payment whereof we bind ourselves and, each of us, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal, be means of a written AGREEMENT (which together with the Contract Documents in said AGREEMENT referred to are collectively sometimes referred to as the "Contract") dated _____ has entered into a contract with the said obligee for Oakland Beach Force Main Rehabilitation, **Contract No. xxx**, in the **City of Warwick, Rhode Island**, a copy of which agreement is attached hereto and by references made a part hereof.

NOW, THEREFORE, THE CONDITION of this obligation is such, that if the Principal shall promptly make payments to all claimants as hereinafter defined, for all labor performed or furnished and for all materials and equipment furnished for or used in or in connection with the Work called for by said AGREEMENT and/or Contract and any modifications thereof, including lumber used but not incorporated in said Work, and for the rental or hire of vehicles, tools and other appliances and equipment furnished for or used in connection with said Work, this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

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- A. A claimant is defined as one having a direct contract with the Principal or with a subcontractor of the Principal for labor, materials and/or equipment used or reasonably required for use in the performance of the said Work, labor and materials being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental or equipment directly applicable to the said AGREEMENT and/or Contract and any modifications thereof.
- B. The above named Principal and Surety hereby jointly and severally agree with the Authority that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials or equipment were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Authority shall not be liable for the payment of any costs or expenses of any such suit.
- C. No suit or action shall be commenced hereunder by any claimant.

Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: the Principal, the Authority, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials or equipment for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials or equipment were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Authority or Surety at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the said Work is located, save that such service need not be made by a public officer;

After the expiration of one (1) year following the date on which the Principal ceased work on said AGREEMENT and/or Contract and any modifications thereof, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the State in which the said Work, or any part thereof, is situated, or in the United States District Court for the district in which the said Work, or any part thereof, is situated, and not elsewhere.

- D. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics liens which may be filed of record against said AGREEMENT and/Contract or said Work, whether or not claim for the amount of such lien be presented under and against this bond.

The surety, for value received, agrees further that no changes in, omissions from, or alterations, modifications or additions to the terms and provisions of said AGREEMENT and/or Contract or the Work to be performed thereunder, and that no extensions of time given or changes made in the manner or time of making payments thereunder, shall in

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any way affect the Surety's obligations on this Bond, and the Surety hereby waives notice of any such changes, omissions, alterations, modifications, additions or extensions.

IN WITNESS WHEREOF, we have hereunto set our hands and seals to counterparts of this bond, this _____ day of _____, in the year

Two Thousand _____.

_____(SEAL)
Principal

_____(SEAL)
Principal

_____(SEAL)
Surety

_____(SEAL)
Surety

NOTE:

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized officer or officers.

If this Bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his power of attorney showing his authority to sign such Bonds.

There should be executed an appropriate number of counterparts of the Bond corresponding to the number of counterparts of the AGREEMENT.

Date of Bond must not be prior to the date of Contract.

Important

Surety Companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

The attention of the Surety Companies and Principal executing this Labor and Materials Bond is directed to the fact that said Bond shall remain in full effect throughout the life of any guaranty or warranty periods stipulated in the Contract Documents and/or Agreement.

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**CERTIFICATE OF ACKNOWLEDGMENT OF CONTRACTOR IF A CORPORATION
For CONTRACT BONDS**

State of _____)

) ss:

County of _____)

On this _____ day of _____, 20____, before me personally came
_____ to me known, who being by me duly sworn, did depose
and say as follows:

That he resides at _____,

and is the _____,

of _____,

the corporation described in and which executed the foregoing instrument; that he knows the corporate seal of said corporation; that the seal affixed to the foregoing instrument is such corporate seal and it was so affixed by order of the Board of Directors of said corporation; and that by the like order he signed thereto his name and official designation.

Notary Public (Seal)

My commission expires _____

GENERAL CONDITIONS OF CONTRACT AGREEMENT

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GENERAL CONDITIONS OF CONTRACT AGREEMENT

1. DEFINITIONS

a. General. Wherever the words hereinafter defined or pronouns used in their stead occur in the Contract Documents, they shall have the following meaning indicated which shall be applicable to both the singular and plural thereof:

1. ADDENDA - Written or graphic instruments prior to the opening of Bids, which clarify, correct or change the Bidding Requirements or Contract Documents.
2. AGREEMENT - the written contract between Authority and Contractor covering the Work to be performed.
3. "AS DIRECTED," "AS ORDERED," "AS REQUESTED," "AS REQUIRED", "AS PERMITTED," or words of like import are used, it shall be understood that the direction, order, request, requirement, or permission of the Engineer is intended.
4. "APPROVED," "ACCEPTABLE," "SUITABLE," "SATISFACTORY," and words of like import shall mean approved by, acceptable to, suitable to, or satisfactory to the Engineer.
5. APPLICATION FOR PAYMENT - Form used by Contractor in requesting progress or final payments, format to be acceptable to the Engineer.
6. BID - The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
7. BIDDER - Any person, firm or corporation submitting a bid for the work.
8. CHANGE ORDER - A document recommended by the Engineer, which is signed by the Contractor and Authority authorizing the addition, deletion or revision in the Work, or adjustment in the Contract Price or Contract Time, issued on or after the effective date of the Agreement.
9. CONTRACTOR - The person, firm or corporation with whom the Authority has entered into the Agreement.
10. CONTRACT BONDS - Bid, Performance, and Labor and Materials Bonds and other instruments of security furnished by the Contractor and his surety in accordance with the Contract Documents.
11. CONTRACT DOCUMENTS - The Agreement, Addenda, Bid, Post Bid documentation submitted prior to the Notice Award, The Notice to Proceed, Bonds, These General Conditions, the Supplemental Conditions, the Miscellaneous Conditions, the Specifications, the Drawings, all written Amendments, Change Orders, Field Orders, and Engineers written interpretations and clarifications.
12. CONTRACT PRICE - The total monies payable to the Contractor under the terms and conditions of the Contract Documents.
13. CONTRACT TIME - The number of calendar days stated in the Contract Documents for the completion of the Work.
14. CONSTRUCTION SUPERINTENDENT - That person designated by the Contractor to carry out the provisions of the Contract.
15. DATUM OR LEVELS - The figures given in the Contract and Specifications or upon the Drawings after the work elevation or abbreviation of it, shall mean the

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16. distance in feet above mean sea level, the base of the State of Rhode Island and the United States Geodetic Survey (U.S.G.S.).
17. DRAWINGS - The part of the Contract Drawings which shows the characteristics and scope of the Work to be performed and which have been prepared or approved by the Engineer.
18. EARTH - Wherever used as the name of an excavated material or material to be excavated, shall mean all kinds of material other than rock as defined in this section.
19. ELEVATION - The figures given on the Drawings or in the other Contract Documents after the work "elevation" or abbreviation of it shall mean the distance in feet above the datum adopted by the Engineer.
20. ENGINEER -The word "Engineer" shall mean the person or persons, partnership or corporation holding the position or acting in the capacity of Engineer for the Authority in respect to this Contract, whether acting directly or through his properly authorized agents, such agents acting only within the scope of the particular duties entrusted to them. The Engineer designated is the corporation of Garofalo & Associates, Inc., 85 Corliss Street, Providence, Rhode Island, 02904.
21. FIELD ORDER - A written order issued by the Engineer which orders minor changes in the Work which do not involve a change in the Contract Price or an extension of the Contract time.
22. GENERAL REQUIREMENTS – The first section of the Technical Specifications.
23. "HEREIN," "HEREINAFTER," "HEREUNDER," and words of like import shall be deemed to refer to the Contract Documents.
24. NOTICE OF AWARD - The written notice of the acceptance of the Bid from the Authority to the successful Bidder.
25. NOTICE TO PROCEED - Written communication issued by the Authority to the Contractor authorizing him to proceed with the Work and establishing the date of commencement of the Work.
26. CITY - The City of Warwick, Rhode Island acting through its Warwick Sewer Authority.
27. PROJECT OR CONTRACT - The undertaking to be performed in the Contract Documents.
28. PROJECT REPRESENTATIVE - The authorized representative of the Authority who is assigned to the project site or any part thereof.
29. ROCK - wherever used as the name of an excavated material to be excavated, shall mean only boulders and pieces of concrete and masonry exceeding 1 cu. yd. in volume, or igneous, sedimentary, metamorphic, and conglomerate rock which, in the opinion of the Engineer, requires, for its removal, drilling and blasting, wedging, sledging, barring, or breaking up with a power-operated tool. No soft or disintegrated rock which can be removed with a hand pick or power-operated excavator or shovel, no loose, shaken, or previously blasted rock or broken stone in rock fillings, or elsewhere, and no rock exterior to the maximum limits of measurement allowed, which may fall into the excavation, will be measured or allowed as "rock."

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30. SHOP DRAWINGS - All drawings, diagrams, schedules and other data or information prepared for and submitted by the Contractor, to illustrate portions of the Work.
31. SPECIFICATIONS - The portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.
32. SUBCONTRACTOR - An individual, firm or corporation, approved by the Authority and Engineer having a direct contract with the Contractor or with any other Sub-Contractor for the performance of a part of the Work on the Project.
33. SUBSTANTIAL COMPLETION - Where the Work has progressed to the point where, in the opinion of the Engineer, the Work is sufficiently complete, in accordance with the Contract Documents, so that the Work can be utilized for the purpose intended.
34. SUPPLEMENTARY CONDITIONS - The part of the Contract Documents which amends or supplements these General Conditions.
35. SUPPLIER - Any person or organization who supplies materials or equipment for the Work, including that fabricated to a special design, but who does not perform labor at the site.
36. WRITTEN NOTICE - Any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed when posted by certified or registered mail to the said party at his last given address or delivered in person to said party or his authorized representative on the Work.
37. WORK - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents.

2. THE CONTRACT DOCUMENTS.

- a. **General.** The AGREEMENT, the INFORMATION FOR BIDDERS, the Contractor's BID as accepted by the Authority, the SPECIFICATIONS, the Drawings, and all Addenda and amendments to any of the foregoing collectively constitute the Contract Documents, and are sometimes herein referred to as the "Contract".
 1. The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. In the event of any conflict or inconsistency between the provisions of the AGREEMENT and the provisions of any of the other Contract Documents, the provisions of the AGREEMENT shall prevail.
 2. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the edition of the standard specification, manual, code or laws or regulations

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identified in the reference. In the event a particular edition is not identified, the reference shall mean the latest amended edition in effect at the time of receipt of the Bid. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall change the duties and responsibilities of the Authority, the Contractor or the Designer, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to the Engineer, or any of the Engineer's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the provisions of the AGREEMENT.

3. OBLIGATIONS AND LIABILITY OF CONTRACTOR.

- a. **General.** The following paragraphs set forth the obligations and liability of the Contractor.
 1. The Contractor shall do all the work and perform and furnish all the labor, services, materials, equipment, plant, machinery, apparatus, appliances, tools, supplies and all other things (except as otherwise expressly provided herein) necessary and as herein specified for the proper performance and completion of the Work in the manner and within the time hereinafter specified, in strict accordance with the Drawings, Specifications and other Contract Documents, in conformity with the directions and to the satisfaction of the Engineer, and at the prices herein agreed upon therefor.
 2. All parts of the Work and all fixtures, equipment, apparatus and other items indicated on the Drawings and not mentioned in the Specifications, or vice versa, and all work and material usual and necessary to make the work complete in all its parts, including all incidental work necessary to make it complete and satisfactory and ready for use and operation, whether or not they are indicated on the Drawings or mentioned in the Specifications, shall be furnished and executed the same as if they were called for both by the Drawings and by the Specifications.
 3. The Contractor shall coordinate his operations with those of any other contractors who may be employed on other work of the Authority, shall avoid interference therewith, and shall cooperate in the arrangements for storage of materials and equipment.
 4. The Contractor shall conduct his work so as to interfere as little as possible with private business and public travel. Wherever and whenever necessary or required, he shall maintain fences, furnish watchmen, maintain lights, and take such other precaution as may be necessary to protect life and property.
 5. The Contractor shall indemnify and save harmless the Authority and the Engineer and their officers, agents, servants and employees, from and against any and all claims, demands, suits, proceedings, liabilities, judgments, awards, losses, damages, costs and expenses, including attorneys' fees, on account of bodily injury, sickness, disease or death sustained by any person or persons or injury or damage to or destruction of any property, directly or indirectly arising out of, relating to or in connection with the Work, whether or not due or claimed to be

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due in whole or in part to the active, passive or concurrent negligence or fault of the Contractor, his officers, agents, servants or employees, any of his subcontractors, or any of their respective officers, agents, servants or employees and/or any other person or persons, and whether or not such claims, demands, suits or proceedings are just, unjust, groundless, false or fraudulent; and the Contractor shall and does hereby assume and agrees to pay for the defense of all such claims, demands, suits and proceedings, provided, however, that the Contractor shall not be required to indemnify the Engineer, his officers, agents, servants or employees, against any such damages occasioned solely by defects in maps, plans, drawings, designs or specifications prepared, acquired or used by the Engineer and/or solely by the negligence or fault of the Engineer; and provided further, that the Contractor shall not be required to indemnify the Authority, its officers, agents, servants or employees, against any such damages occasioned solely by acts or omissions of the Authority other than supervisory acts or omissions of the Authority in the Work.

6. The Contractor shall have complete responsibility for the Work and the protection thereof, and for preventing injuries to persons and damage to the Work and property and utilities on or about the Work, until final completion and final acceptance thereof. He shall in no way be relieved of his responsibility by and right of the Engineer to give permission or directions relating to any part of the Work, by any such permission or directions given, or by failure of the Engineer to give such permission or directions. The Contractor shall bear all costs, expenses, losses and damages on account of the quantity or character of the Work or the nature of the land (including but not limited to subsurface conditions) in or under or on which the Work is done being different from that indicated or shown in the Contract Documents or from what was estimated or expected, or on account of the weather, elements, or other causes.
7. The Contractor shall conduct his operations so as not to damage existing structures or work installed either by him or by other contractors. In case of any such damage resulting from his operations, he shall repair and make good as new the damaged portions at his own expense with the consent of the damaged party. In the event that consent is not given, the Contractor shall continue liable for the damage caused.
8. The Contractor shall be as fully responsible to the Authority for the acts and omissions of his subcontractors, their officers, agents, servants and employees as he is for his own acts and omissions and those of his own officers, agents, servants and employees.
9. Should the Contractor sustain any loss, damage or delay through any act or omission of any other contractor or any subcontractor of any such other contractor, the Contractor shall have no claim against the Authority therefor, other than for an extension of time, but shall have recourse solely to such other contractor or subcontractor.
10. If any other contractor or any subcontractor of any such other contractor shall suffer or claim to have suffered loss, damage or delay by reason of the acts or omissions of the Contractor or of any of his subcontractors, the Contractor agrees to assume the defense against any such claim and to reimburse such other contractor or subcontractor for such loss or damage.

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11. The Contractor agrees to and does hereby indemnify and save harmless the Authority from and against any and all claims by such other contractors or subcontractors alleging such loss, damage or delay from and against any and all claims, demands, suits, proceedings, liabilities, judgments, awards, losses, damages, costs and expenses, including attorneys' fees, arising out of, relating to or resulting from such claims.
12. The Contractor shall promptly pay all federal, state and local taxes which may be assessed against him in connection with the Work or his operations under the AGREEMENT and/or the other Contract Documents, including, but not limited to, taxes attributable to the purchase of material and equipment, to the performance of services, and the employment of persons in the prosecution of the Work.

4. **AUTHORITY OF THE ENGINEER.**

- a. **General.** The following paragraphs establish the authority of the Engineer for this Contract.
 1. The Engineer shall be the judge of the intent and meaning of the Drawings and Specifications and his decisions thereon and his interpretation thereof shall be final, conclusive and binding on all parties.
 2. The Engineer shall be the Authority's representative during the life of the Contract and he shall observe the Work in progress on behalf of the Authority. He shall have authority (a) to act on behalf of the Authority to the extent expressly provided in the Contract or otherwise in writing; (b) to determine the amount, quality, acceptability and fitness of all work, materials and equipment required by the Contract; and (c) to decide all questions which arise in relation to the Work, the execution thereof, and the fulfillment of the Contract.
 3. The Contractor shall proceed without delay to perform the work as directed, instructed, determined or decided by the Engineer and shall comply promptly with such directions, instructions, determinations or decisions. If the Contractor has any objection thereto he may, within ten (10) days of having received any such direction, instruction, determination or decision, require that any such direction, instruction, determination or decision be put in writing and within ten (10) days after receipt of any such writing he may file a written protest with the Authority stating clearly and in detail his objections, the reasons therefor, and the nature and amount of additional compensation, if any, to which he claims he will be entitled thereby. A copy of such protest shall be filed with the Engineer at the same time it is filed with the Authority. Unless the Contractor requires that any such direction, instruction, determination or decision be put in writing within ten (10) days of having received such direction, instruction, determination or decision and unless the Contractor files such written protest with the Authority and Engineer within such ten (10) day period, he shall be deemed to have waived all grounds for protest of such direction, instruction, determination, or decision and all claims for additional compensation or damages occasioned thereby, and shall further be deemed to have accepted such direction, instruction, determination, or decision as being fair, reasonable, and finally determinative of his obligations and rights under the Contract.

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5. SUPERVISION OF WORK.

- a. **General.** The following paragraphs set out the requirements for the Contractor's supervision of the work.
1. The Contractor shall be solely responsible for supervision of the Work, shall give the work the constant attention necessary to ensure the expeditious and orderly progress thereof, and shall cooperate with the Engineer in every possible way.
 2. At all times, the Contractor shall have his agent on the Work a competent superintendent capable of reading and thoroughly understanding the Drawings and Specifications, with full authority to execute the directions of the Engineer without delay and to supply promptly such labor, services, materials, equipment, plant, apparatus, appliances, tools, supplies and other items as may be required. Such superintendent shall not be removed from the Work without the prior written consent of the Engineer. If, in the opinion of the Engineer, the superintendent or any successor proves incompetent, the Contractor shall replace him with another person approved by the Engineer; such approval, however, shall in no way relieve or diminish the Contractor's responsibility for supervision of the Work.
 3. Whenever the Contractor or his agent or superintendent is not present on any part of the Work where it may be necessary to give directions or instructions with respect to such work, such directions or instructions may be given by the Engineer to and shall be received and obeyed by the designated foreman or any other person in charge of the particular work involved.

6. **INSURANCE.** The Contractor shall assume full responsibility for the safety of his employees, injury to persons other than his employees, and damage to property arising out of work performed by the Contractor.

The Contractor shall indemnify and hold harmless the Authority and the Engineer from and against any liability imposed by law or otherwise upon the Authority and the Engineer, their officers, representatives, agents and employees for injury or death of persons and for loss of damage to property caused by fault or negligence of Contractor and its officers, representatives, subcontractors, and employees in the performance of the services under this Agreement.

Contractor shall defend any claim or suit brought against the Authority or the Engineer based upon such injury, death, loss or damage as described in the previous paragraph, and shall pay all costs and expenses (including legal fees) in connection with such claim or suit, provided the Engineer shall give Contractor prompt notice of such claim or suit, and shall provide such reasonable assistance in connection therewith as Contractor may request.

The Contractor shall carry insurance in the usual form with the following minimum limits:

Comprehensive General Liability - Comprehensive General Liability including personal injury and property damage liability with a combined single limit of \$1,000,000 per occurrence, \$2,000,000 aggregate. Policy to include Owner's and Contractor's Protective Liability, Contractual Liability assumed under this contract, and Broad Form Property Damage Liability.

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Worker's Compensation and Employer's Liability - Worker's Compensation (Coverage A) in accordance with the laws of the State of Rhode Island; and Employer's Liability (Coverage B) with a limit of liability of \$500,000 each accident, \$500,000 disease policy limit, and \$500,000 disease each employee.

Comprehensive Auto Liability - Comprehensive Auto Liability including bodily injury and property damage endorsed to include owned, hired and non-owned vehicle liability. A combined single limit of \$1,000,000 per accident for bodily injury and property damage liability shall be required.

Alternately, if the Contractor owns no vehicles, then it should provide a certificate of insurance which evidences that it has in effect a Non-Owned and Hired Vehicle Insurance Policy with bodily injury \$1,000,000 per accident.

The Contractor shall furnish the Engineer with certificates of insurance indicating full coverage for these limits before starting any of its operations under this Agreement. Certificates shall be endorsed with the requirement that cancellation or changes of a policy will not be made until after thirty (30) working days written notice to the Engineer.

By doing the work called for under this Agreement, the Contractor shall become liable for any claim growing out of the fraudulent or negligent submissions of subsurface data by the Contractor, including any professional liability claim which might be brought against the Authority and the Engineer arising out of such fraudulent or negligent submission.

The carrying of any of the insurance required hereunder shall not be interpreted as relieving Contractor of any responsibility to the Authority or the Engineer.

7. PATENTS.

- a. **Indemnity Clause.** The Contractor's attention is directed to the following "Patent Indemnity Clause" illustrating the format and/or required wording therefore which shall be used by all manufacturers and/or suppliers, as deemed necessary by the Authority and Engineer, as an Indemnification and Hold Harmless Agreement.

This Agreement shall be accepted and approved in form by the Authority and Engineer prior to the approval and/or installation of the product.

PATENT INDEMNITY CLAUSE

"In Consideration for their purchase and use of the (Name of product and/or equipment) manufactured by (name of Manufacturer) and for other good and valuable consideration, (Name of Manufacturer) agrees to defend and hold harmless (Name of Contractor), Garofalo & Associates, Inc., and the Authority of Warwick, Rhode Island, and their employees and agents, from and against any liability, loss, cost, expense or damage including reasonable attorneys' and accountants' fees incurred by these entities in defending or prosecuting any claim for such liability, loss, cost, expense or damage resulting or arising out of a claim that the use of the above mentioned product and/or equipment delivered hereunder directly infringes any United States Patent, provided that (Name of Manufacturer) is given authority, information, and assistance for the defense of such suit, and (Name

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of Manufacturer) shall pay all damages and costs assessed against the above named entities for the use of such produce and/or equipment provided, however, that this indemnification shall not apply to equipment of (Name of Contractor) design, and provided further that if the use of such product and/or equipment is enjoined in any suit, (Name of Manufacturer) shall at its own expense and its option either procure for (name of Contractor) the right to continue the normal use of such produce and/or equipment, replace said product and/or equipment, modify said equipment or refund the purchase price thereof; and provided further that (Name of Manufacturer) indemnity as to use shall not apply to infringement resulting from the use of the produce and/or equipment delivered hereunder in combination with other items where use of the product and/or equipment per se does not constitute infringement."

8. COMPLIANCE WITH LAWS. The Contractor shall keep himself fully informed of all existing and future federal, state, and local laws, ordinances, rules, and regulations affecting those engaged or employed on the Work, the materials and equipment used in the Work or the conduct of the Work, and of all orders, decrees and other requirements of bodies of tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency is discovered in the Drawings, Specifications or other Contract Documents in relation to any such law, ordinance, rule, regulation, order, decree or other requirement, the Contractor shall forthwith report the same to the Engineer in writing. The Contractor shall at all times observe and comply with, and cause all his agents, with all such existing and future laws, ordinances, rules, regulations, orders, decrees and other requirements, and he shall protect, indemnify and save harmless the Authority, its officers, agents, servants and employees, from and against any and all claims, demands, suits, proceedings, liabilities, judgments, penalties, losses, damages, costs and expenses, including attorneys' fees, arising from or based upon any violation or claimed violation of any such law, ordinance, rule, regulation, order, decree or other requirement, whether committed by the Contractor or any of his agents, servants, employees or subcontractors.

9. PROVISIONS REQUIRED BY LAW DEEMED INSERTED. Each and every provision of law and clause required by law to be inserted in the Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though they were included herein. 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.

10. PERMITS. The Contractor shall, at his own expense, take out and maintain all necessary permits from the county, municipal, or other public authorities; shall give the notices required by law; and shall post all bonds and pay all fees and charges incident to the due and lawful prosecution of the Work.

11. NOT TO SUBLET OR ASSIGN.

a. General. Restrictions on subletting follow.

1. The Contractor shall constantly give his personal attention to the faithful prosecution of the Work, shall keep the same under his personal control, shall not assign the Contract or sublet the Work or any part thereof without the

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previous written consent of the Authority, and shall not assign any of the moneys payable under the Contract, or his claim thereto, unless by and with the like written consent of the Authority and the Surety on the Contract Bonds. Any assignment or subletting in violation hereof shall be void and unenforceable.

2. The Contractor shall not sublet or assign work to a subcontractor(s), for a total in excess of fifty (50) percent of the Contract Price, without prior written approval of the Authority and Engineer.
3. The Contractor shall be fully responsible to the Authority for the acts and omissions of his subcontractors, suppliers, and of persons either directly or indirectly employed by them as he is for the acts and omissions of persons directly employed by him.
4. The Contractor shall cause appropriate provisions, and applicable State or Federal regulations, to be inserted in all subcontractors relative to the work to bind subcontractors to the Contractor by the terms of the Contract Documents insofar as applicable to the work of subcontractors, and to give the Contractor the same power as regards terminating any subcontract that the Authority may exercise over the Contractor under any provision of the Contract Documents.
5. The Contractor's attention is directed to the fact that nothing contained in this Contract shall create any contractual relation between any subcontractor and the Authority.

12. DELAY BY CITY. The Authority may delay the beginning of the Work or any part thereof if the necessary lands or rights-of-way for such work shall not have been obtained. The Contractor shall have no claim for additional compensation or damages on account of such delay, but shall be entitled only to any extension of time as hereinafter provided.

13. TIME FOR COMPLETION.

a. General. Provisions related to delays and time for completion of the work follow.

1. The rate of progress shall be such that the Work shall be performed and completed in accordance with the Contract before the expiration of the time limits within 365 consecutive calendar days after the acceptance of the Notice to Proceed, except as otherwise expressly provided herein.
2. It is agreed that the rate of progress herein required has been purposely made low enough to allow for the ordinary and foreseeable delays incident to construction work of this character. No extension of time will be given for ordinary or foreseeable delays, inclement weather, or accidents, and the occurrence of such will not relieve the Contractor from the necessity of maintaining this rate of progress and completing the Work within the stipulated time limit.
3. If delays are caused by acts of God, acts of Government, unavoidable strikes, extra work, or other cause or contingencies clearly beyond the control or responsibility of the Contractor, the Contractor may be entitled to additional time to perform and complete the Work, provided that the Contractor shall, within ten

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(10) days from the beginning of such delay notify the Authority in writing, with a copy to the Engineer, of the cause and particulars of the delay. Upon receipt of such notification, the Authority shall review and evaluate the cause and extent of the delay. If, under the terms of the AGREEMENT, the delay is properly excusable, the Authority will, in writing, appropriately extend the time for completion of the Work. (This paragraph will be interpreted to include delays in receipt of equipment provided that the Contractor placed his order and submitted shop drawings for such equipment promptly after execution of the Contract, that he has shown due diligence in following the progress of the order, and that the time required for delivery is in accordance with conditions generally prevailing in the industry.) The Contractor agrees that he shall not have or assert any claim for nor shall he be entitled to any additional compensation or damages on account of such delays.

4. The time in which the Work is to be performed and completed is of the essence of this AGREEMENT.

14. LIQUIDATED DAMAGES. In case the Contractor fails to complete the Work satisfactorily on or before the date of completion or interim milestone fixed herein or as duly extended as hereinbefore provided, the Contractor agrees that the Authority shall deduct from the payments due the Contractor each month the sum of \$2,500.00 for each calendar day of delay, which sum is agreed upon not as a penalty, but as fixed and liquidated damages for each day of such delay. If the payments due the Contractor are less than the amount of such liquidated damages, said damages shall be deducted from any other moneys due or to become due the Contractor, and, in case such damages shall exceed the amount of all moneys due or to become due the Contractor, the Contractor or his Surety shall pay the balance to the Authority.

15. NIGHT AND SUNDAY WORK. No work shall be done at night or on Saturday or Sunday except (1) usual protective work, such as pumping and the tending of lights and fires, (2) work done in case of emergency threatening injury to persons or property, (3) if all of the conditions set forth in the next paragraph below are met or (4) Contract activities specifically specified elsewhere to be conducted at night or on Saturday or Sunday. Work may be allowed on Saturday if the work will be to the advantage of the Authority, and the Engineer has given written permission for such work on Saturday.

No work other than that included in (1) and (2) above shall be done at night except when (a) in the sole judgment of the Authority, the work will be of advantage to the Authority and can be performed satisfactorily at night, (b) the work will be done by a crew organized for regular and continuous night work, and (c) in the sole judgment of the Authority and Engineer, adequate noise prevention measures are incorporated into the Work by the Contractor to minimize any noise impact within the work area and (d) the Engineer has given written permission for such night work. (e) Night work is defined as work between the hours of 4:30 p.m. and 7:00 a.m.

16. EMPLOY COMPETENT PERSONS. The Contractor shall employ only competent persons on the Work and shall not employ persons or means which may cause strikes, work stoppages or any disturbances by persons employed by the Contractor, any subcontractor, the Authority, the Engineer or any other contractor. Whenever the Engineer notifies the Contractor in writing that in his opinion any person on the Work is incompetent, unfaithful, disorderly, or otherwise unsatisfactory, or not employed in accordance with the provisions of the Contract, such person shall be discharged from

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the Work and shall not again be employed on it, except with the written consent of the Engineer.

17. **EMPLOY SUFFICIENT LABOR AND EQUIPMENT.** If in the sole judgment of the Engineer the Contractor is not employing sufficient labor, plant, equipment or other means to complete the Work within the time specified, the Engineer may, after giving written notice, require the Contractor to employ such additional labor, plant, equipment and other means as the Engineer deems necessary to enable the Work to progress properly.
18. **INTOXICATING LIQUORS AND/OR DRUGS.** The Contractor shall not sell and shall neither permit nor suffer the introduction and/or use of intoxicating liquors and/or drugs upon or about the Work.
19. **ACCESS TO WORK.** The Authority, the Engineer, and their officers, agents, servants and employees may at any and all times and for any and all purposes, enter upon the Work and the site thereof and the premises used by the Contractor, and the Contractor shall at all times provide safe and proper facilities therefor.
20. **EXAMINATION OF WORK.** The Engineer shall be furnished by the Contractor with every reasonable facility for examining and inspecting the Work and for ascertaining that the Work is being performed in accordance with the requirements and intent of the Contract, even to the extent of requiring the uncovering or taking down portions of furnished work by the Contractor.

Should the work thus uncovered or taken down prove satisfactory, the cost of uncovering or taking down and the replacement thereof shall be considered as extra work unless the original work was done in violation of the Contract in point of time or in the absence of the Engineer or his inspector and without his written authorization, which case said cost shall be borne by the Contractor. Should the work uncovered or taken down prove unsatisfactory, said cost shall likewise borne by the Contractor.

Examination of inspection of the Work shall not relieve the Contractor of any of his obligations to perform and complete the Work as required by the Contract.

21. **DEFECTIVE WORK, ETC.** Until acceptance and during the applicable guarantee period thereafter, the Contractor shall promptly, without charge, repair, correct or replace work, equipment, materials, apparatus or parts thereof which are defective, damaged or unsuitable or which in any way fail to comply with or be in strict accordance with the provisions and requirements of the Contract or applicable guarantee and shall pay to the Authority all resulting costs, expenses, losses or damages suffered by the Authority.

If any material, equipment, apparatus or other items brought upon the site for use or incorporation in the Work, or selected for the same, is rejected by the Engineer as unsuitable or not in conformity with the Specifications or any of the other Contract Documents, the Contractor shall forthwith remove such materials, equipment, apparatus and other items from the site of the Work and shall at his own cost and expense make good and replace the same and any material furnished by the Authority which shall be damaged or rendered defective by the handling or improper installation by the Contractor, his agents, servants, employees or subcontractors.

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22. PROTECTION AGAINST WATER AND STORM. The Contractor shall take all precautions necessary to prevent damage to the Work by storms or by water entering the site of the Work directly or through the ground. In case of damage by storm or water, the Contractor shall at his own cost and expense make such repairs or replacements or rebuild such parts of the Work as the Engineer may require in order that the finished Work may be completed as required by the Contract.

23. RIGHT TO MATERIALS. Nothing in the Contract shall be construed as vesting in the Contractor any right of property in the materials, equipment, apparatus and other items furnished after they have been installed or incorporated in or attached or affixed to the Work or the site, but all such materials, equipment, apparatus and other items shall, upon being so installed, incorporated, attached or affixed, become the property of the Authority. Nothing in this subsection shall relieve the Contractor of his duty to protect and maintain all such materials, equipment, apparatus and other items.

24. CHANGES IN THE CONTRACT.

a. Right to Change. The Engineer reserves the right to make changes in the Contract at any time during the progress of the work as are necessary to satisfactorily complete the Project. Such changes shall not invalidate the Contract nor release the Surety. The Contractor agrees to perform the work as directed by the Engineer. Any costs applicable to such changes will be paid for by the execution of an appropriate Contract Addendum.

b. Causes for Changes. Changes in the Contract may result from any of the following causes, all of which are defined below by the indicated Subsections of the Rhode Island Standard Specifications for Road and Bridge Construction, 2004 Edition.

1. Differing site conditions; Subsection 104.03.
2. Alterations in the Plans or Details; additions to, reductions in, or elimination of an existing item of work contained in the Proposal; Subsection 104.04.
3. Extra or unforeseen work for which there is no item of work in the Proposal; Subsection 104.05.
4. Suspension of the work for any reason; Subsection 104.06.
5. Significant changes in the character of the work; Subsection 104.07.

25. DIFFERING SITE CONDITIONS, CHANGES, EXTRA WORK AND FORCE ACCOUNT.

a. Methods of Payment. Differing site conditions, changes, extra work, and significant changes in the character of the work, all performed in accordance with **SECTION 104; SCOPE OF WORK**, Rhode Island Standard Specifications for Road and Bridge Construction, 2004 Edition, will be paid for in accordance with the following methods as appropriate:

1. Contract unit prices.
2. Unit prices agreed upon in the order authorizing the work.
3. An agreed upon lump sum amount.
4. If directed by the Authority, on a Force Account Basis to be compensated in the following manner:

(a) Labor. For all labor and foremen in direct charge of the specific operations,

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the Contractor shall receive the rate of wage actually paid as shown by its certified payroll, which rate shall be at least the prevailing rate of wage (or scale), for each and every hour that said labor and foremen are actually engaged in the work.

No part of the salary or expenses of anyone connected with the Contractor's forces above the grade of foreman, and having general supervision of the work, will be included in the labor item as specified above.

The Contractor shall receive the actual costs paid to, or in behalf of, workers by reason of subsistence and travel allowances, health and welfare benefits, pension fund benefits or other benefits, when such amounts are required by collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work.

An amount equal to 20 percent of the sum of the above items will also be paid the Contractor.

(b) Bond, Insurance and Tax. For property damage, liability, worker's compensation insurance premiums, unemployment insurance contributions, and social security taxes incurred on force account work, the Contractor shall receive the actual cost, to which cost a surcharge of 6-percent will be added. The Contractor shall furnish satisfactory evidence of the rate or rates paid for such bonds, insurances and taxes.

(c) Materials. For materials accepted by the Engineer and used in the work, the Contractor shall receive the actual cost of such materials delivered to the site, including transportation charges paid (exclusive of machinery rentals as hereinafter set forth), to which cost a surcharge of 15 percent will be added. The Contractor will not be reimbursed for any penalty or carrying charge incurred due to late or delayed payment for materials used in the work.

(d) Equipment. For any machinery or special equipment (other than small tools) including transportation cost, the use of which has been authorized by the Engineer, the Contractor shall receive either the "hourly rental rates" as prescribed herein by the Authority, or the actual documented cost plus an amount equal to 10 percent of said actual documented cost, whichever is less. Under no circumstance shall the payment exceed the replacement cost of the equipment.

All rental rates shall include the estimated operating cost as indicated for that equipment in either the Rental Rate Blue Book or the Rental Rate Blue Book for Older Equipment, including the Rate Adjustment Tables approved for projects wholly or partially funded by the Federal Highway Administration (FHWA). Operators' wages are not included in the estimated operating cost and are paid separately, except for certain specified equipment in which the operator's wages are included. Rental rates shall be submitted to the Authority prior to the start of construction work.

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The "hourly rental rate" for an individual piece of equipment shall be determined by dividing the associated monthly rate, modified by the Rate Adjustment Tables, as contained in the Rental Rate Blue Book by one hundred seventy-six (176). There will be no adjustment to the hourly rate for the period of use.

For rented equipment, the cost shall be based on the actual documented cost plus an amount equal to 10 percent of said actual documented cost, subject to the conditions set forth below. The actual documented cost shall consist of the paid invoice for rented equipment plus other documented operating costs (i.e., fuel, maintenance, repairs, etc.).

Actual documented costs plus 10 percent of said costs shall not exceed the cost as calculated from the RENTAL RATE BLUE BOOK or the RENTAL RATE BLUE BOOK FOR OLDER CONSTRUCTION EQUIPMENT. The Contractor shall submit documentation for both the hourly rental rates and actual documented costs to determine that the actual documented costs plus 10 percent of said costs does not exceed the calculated rental rate costs. No percentage surcharges will be added to the "Blue Book" rates as prescribed herein for rented equipment.

For equipment which is already on the project, the rental period shall start when such equipment is ordered to work by the Engineer, and shall continue until ordered to stop work.

For equipment which has to be brought to the project specifically for use on force account work, the Authority will pay all loading and unloading costs, and all transportation costs to and from the project, including assembling and dismantling, provided, however, that the cost of return transportation shall not exceed that of moving the equipment to the project. Loading, unloading and transportation costs will not be paid if the equipment is used for work other than force account work while on the project. The rental period shall start at the time the equipment is ready for operation, and shall extend during the period of time the equipment is actually utilized on force account work. The rental period shall end when the equipment is released by the Engineer.

All equipment, including trucks, shall in the judgment of the Engineer, be in good working condition and suitable for the purpose intended. The Engineer reserves the right to determine the number of units of the various types of equipment to be employed on force account work. The manufacturer's model identification shall be the basis for identifying the type of equipment for payment purposes. Certification for the model year of the equipment will be required.

(e) Subcontracting. For work performed by a subcontractor, the Contractor shall accept as full payment therefore, an amount equal to the actual cost to the Contractor of such work performed by the subcontractor as determined by the Engineer, plus 10 percent of said cost.

(f) Miscellaneous. No additional allowance will be made for general

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superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.

(g) Compensation. The Contractor's representative and the Engineer shall daily compare records of work completed on a force account basis. The Engineer will then prepare the daily work sheets and said sheets will be signed by the Contractor's representative no later than noon of the next working day.

(h) Statements. No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with six copies of itemized statements of the cost of such work, incurred on a daily basis, and detailed as follows:

- 1) Name, classification, date, daily hours, total hours, rate and extension for each laborer and foreman.
- 2) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
- 3) Quantities of materials, prices, and extensions.
- 4) Transportation of materials.
- 5) Cost of property damage, liability and worker's compensation insurance premiums, unemployment insurance contributions, and social security taxes.

Statements shall be accompanied and supported by certified payrolls, and receipted invoices for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from its stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

26. EXTENSION OF TIME ON ACCOUNT OF EXTRA WORK. When extra work is ordered near the completion of the Contract or at any time during the progress of the Work which unavoidably increases the time for the completion of the Work, and extension of time shall be granted as hereinbefore provided.

27. CHANGES NOT TO AFFECT BONDS. It is expressly agreed and understood that any changes made in the Work or the Drawings or Specifications therefor (whether such changes increase or decrease the amount thereof or the time required for its performance) or any changes in the manner of time of payments made by the Authority to the Contractor, or any other modifications of the Contract, shall in no way annul, release, diminish or affect the liability of the Surety on the CONTRACT BONDS given by the Contractor, it being the intent hereof that notwithstanding such changes the liability of the Surety on said bonds continue and remain in full force and effect.

28. CLAIMS FOR DAMAGES.

- a. **General.** The following paragraphs establish the procedures for making claims for damages.

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1. If the Contractor makes claim for any damages alleged to have been sustained by breach of contract or otherwise, he shall, within ten (10) days after occurrence of the alleged breach or within five (5) days after such damages are alleged to have been sustained, whichever date is the earlier, file by Certified Mail with the Engineer and Authority a written, itemized statement in triplicate of the details of the alleged breach and the details and amount of the alleged damages. The Contractor agrees that unless such statement is made and filed as so required, his claim for damages shall be deemed waived, invalid and unenforceable, and that he shall not be entitled to any compensation for any such alleged damages. Within ten (10) days after the timely filing of such statement, the Engineer shall file with the Authority one copy of the statement, together with his recommendations for action by the Authority.
2. The Contractor shall not be entitled to claim any additional compensation for damages by reason of any direction instruction, determination or decision of the Engineer, nor shall any such claims be considered, unless the Contractor shall have complied in all respects with **Para. 4.a.1.** of this Section entitled "**Authority of the Engineer,**" including, but not limited to the filing of a written protest in the manner and within the time therein provided.

29. ABANDONMENT OF WORK OR OTHER DEFAULT.

- a. **General.** The procedures for abandonment of the work or default follow.
 1. If the Work shall be abandoned, or any part thereof shall be sublet without previous written consent of the Authority, or the Contract or any moneys payable hereunder shall be assigned otherwise than as herein specified, or if at any time the Engineer shall be of the opinion, and shall so certify in writing, that the conditions herein specified as to rate of progress are not being complied with, or that the Work or any part thereof is being unnecessarily or unreasonably delayed, or that the Contractor has violated or is in default under any of the provisions of the Contract, or if the Contractor becomes bankrupt or insolvent or goes or is put into liquidation or dissolution, either voluntarily or involuntarily, or petitions for an arrangement or reorganization under the Bankruptcy Act, or makes a general assignment for the benefit of creditors or otherwise acknowledges insolvency, the happening of any of which shall be and constitute a default under the Contract, the Authority may notify the Contractor in writing, with a copy of such notice mailed to the Surety, to discontinue all Work or any part thereof; thereupon the Contractor shall discontinue such Work or such part thereof as the Authority may designate; and the Authority may, upon giving such notice, by contract or otherwise as it may determine, complete the Work or such part thereof and charge the entire cost and expense of so completing the Work or such part thereof to the Contractor. In addition to the said entire cost and expense of completing the Work, the Authority shall be entitled to reimbursement from the Contractor and the Contractor agrees to pay to the Authority any losses, damages, costs and expenses, including attorney's fees, sustained or incurred by the Authority by reason of any of the foregoing causes. For the purposes of such completion the Authority may for itself or for any Contractors employed by the Authority take possession of and use or cause to be used any and all materials, equipment, plant, machinery, appliances, tools, supplies and such

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other items of every description that may be found or located at the site of the Work.

2. All costs, expenses, losses, damages, attorney's fees and any and all other charges incurred by the Authority under this subsection shall be charged against the Contractor and deducted and/or paid by the Authority out of any moneys due or payable or to become due or payable under the Contract to the Contractor; in computing the amounts chargeable to the Contractor, the Authority shall not be held to a basis of the lowest prices for which the completion of the Work or any part thereof might have been accomplished, but all sums actually paid or obligated therefor to effect its prompt completion shall be charged to and against the account of the Contractor. In case the costs, expenses, losses, damages, attorney's fees and other charges together with all payments theretofore made to or for the account of the Contractor are less than the sum which would have been payable under the Contract if the Work had been properly performed and completed by the Contractor, the Contractor shall be entitled to receive the difference, and, in case such costs, expenses, losses, damages, attorneys' fees and other charges, together with all payments theretofore made to or for the account of the Contractor, shall exceed the said sum, the Contractor shall pay the amount of the excess to the Authority.

30. PRICES FOR WORK. The Authority shall pay and the Contractor shall receive the prices stipulated in the BID made a part hereof as full compensation for everything performed and furnished and for all risks and obligations undertaken by the Contractor under and as required by the Contract.

31. MONEYS MAY BE RETAINED. The Authority may at any time retain from any moneys which would otherwise be payable hereunder so much thereof as the Authority may deem necessary to complete the Work hereunder and to reimburse it for all costs, expenses, losses, damage and damages chargeable to the Contractor hereunder.

32. FORMAL ACCEPTANCE. This Agreement constitutes an entire contract for one whole and complete Work or result. Fixing of the date of completion and acceptance of the Work or a specified part thereof shall only be effective when accomplished by a writing specifically so stating and signed by the Authority.

33. PROGRESS ESTIMATES.

a. General. Procedures for progress estimates and monthly payments follow.

1. Once a month, except as hereinafter provided, the Engineer shall make an estimate in writing of the total amount and value of the work done to the first of the month by the Contractor. The Authority shall retain 5% of such estimated value as part security for fulfillment of the Contract by the Contractor and shall deduct from the balance all previous payments made to the Contractor, all sums chargeable against the Contractor and all sums to be retained under the provisions of the Contract. The Authority shall pay monthly to the Contractor the balance not deducted and/or retained as aforesaid, except that payment may be withheld at any time if, in the sole judgment of the Engineer, the work is not proceeding in accordance with the Contract. If the Authority deems it expedient to do so, it may cause estimates and payments to be made more frequently than one in each month. No progress estimate or payment need be made when, in

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the sole judgment of the Engineer, the total value of the work done since the last estimate amounts to less than \$10,000.

2. Estimates of lump-sum items shall be based on a schedule dividing each such item into its appropriate component parts together with a quantity and a unit price for each part so that the sum of the products of prices and quantities will equal the Contract price for the item. This schedule must be submitted by the Contractor for and must have the approval of the Engineer before the first estimate becomes due.
3. If the Engineer determines that the progress of the Work will be benefited by the delivery to the site of certain materials and equipment, when available, in advance of actual requirement therefor and if such materials and equipment are delivered and properly stored, protected and insured as determined by the Engineer, the cost to the Contractor or subcontractor as established by invoices or other suitable vouchers satisfactory to the Engineer, less the retained percentages as above provided, may be included in the progress estimates; provided always that there be duly executed and delivered by the Contractor to the Engineer at the same time a Bill of Sale in form satisfactory to the Authority, transferring and assigning to the Authority full ownership and title to such materials or equipment.

34. PARTIAL ACCEPTANCE.

- a. **General.** Conditions for partial acceptance follow.
 1. The Authority may, at any time in a written order to the Contractor (a) declare that he intends to use a specified part of the Work which in his opinion is sufficiently complete, in accordance with the Contract Documents, to permit its use; (b) enclose a tentative list of items remaining to be completed or corrected, and (c) fix the date of acceptance of that specified part of the Work.
 2. Within 45 days after acceptance under this subsection, the Engineer shall make an estimate in writing of the amount and value of the part of the Work so accepted. The Authority shall pay said amount to the Contractor after deducting therefrom all previous payments, all charges against the Contractor as provided for hereunder, and all amounts to be retained under the provisions of the Contract, said payment to be made at the time of the next monthly progress estimate.
 3. Acceptance by the Authority under this subsection shall not relieve the Contractor of any obligations under the Contract Documents except to the extent agreed upon in writing between the Authority and the Contractor.
 4. The Authority shall have the right to exclude the Contractor from any part of the Work which has been accepted, but the Authority will allow the Contractor reasonable access thereto to complete or correct items on the tentative list.

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35. FINAL ESTIMATE AND PAYMENT.

a. **General.** Conditions for final estimate and payment follow.

1. All quantities shown on progress estimates and all prior payments shall be subject to correction in the final estimate and payment as determined by the Engineer.
2. The acceptance by the Contractor of final payment shall be and shall operate as a release to the Authority of all claims and all liability to the Contractor under or by virtue of this Agreement; and upon satisfactory completion of the work performed under this Agreement, as a condition before final payment under this Agreement or as a termination settlement under this Agreement the Contractor shall execute and deliver to the Authority a release of all claims against the Authority arising under or by virtue of, this Agreement, except claims which are specifically exempted by the Contractor to be set forth herein. Unless otherwise provided in this Agreement, by State law or otherwise expressly agreed to be the parties to this Agreement, any payment, including final payment under, this Agreement or settlement upon termination of this Agreement shall not constitute a waiver of the Authority's claims against the Contractor or his sureties under this Agreement or applicable Performance and Labor and Materials Bonds.

36. **LIENS.** If at any time any notices of lien are filed and labor performed or materials or equipment manufactured, furnished, or delivered to or for the Work, the Contractor shall, at its own cost and expense, promptly discharge, remove or otherwise dispose of the same, and until such discharge, removal or disposition, the Authority shall have the right to retain from any moneys payable hereunder an amount which, in its sole judgment, it deems necessary to satisfy such liens and pay the costs and expenses, including attorneys' fees, of defending any actions brought to enforce the same, or incurred in connection therewith or by reason thereof.

37. **CLAIMS.** If at any time there be any evidence of any claims for which the Contractor is or may be liable or responsible hereunder, the Contractor shall promptly settle or otherwise dispose of the same, and until such claims are settled or disposed of, the Authority may retain from any moneys which would otherwise be payable hereunder so much thereof as, in its sole judgment, it may deem necessary to settle or otherwise dispose of such claims and to pay the costs and expenses, including attorney's fees, of defending any actions brought to enforce such claims, or incurred in connection therewith or by reason thereof.

38. **APPLICATION OF MONEYS RETAINED.** The Authority may apply any moneys retained hereunder to reimburse itself for any and all costs, expenses, losses, damage and damages, liabilities, suits, judgments and awards incurred, suffered or sustained by the Authority and chargeable to the Contractor hereunder or as determined hereunder.

39. **NO WAIVER.** Neither the inspection by the Authority or the Engineer, nor any order, measurement, approval, determination, decision or certificate by the Engineer, nor any order by the Authority for the payment of money, nor any payment for or use, occupancy, possession or acceptance of the whole or any part of the Work by the Authority, nor any extension of time, nor any other act or omission of the Authority or of the Engineer shall constitute or be deemed to be an acceptance of any defective or improper work, materials, or equipment nor operate as a waiver of any requirement or

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provision of the Contract, nor of any remedy, power or right of or herein reserved to the Authority, nor of any right to damages for breach of contract. Any and all rights and/or remedies provided for in the Contract are intended and shall be construed to be cumulative; and, in addition to each and every other right and remedy provided for herein or by law, the Authority shall be entitled as of right to a writ of injunction against any breach or threatened breach of the Contract by the Contractor, by his subcontractors or by any other person or persons.

40. **LIABILITY OF AUTHORITY.** No person, firm or corporation, other than the Contractor who signed this Contract as such, shall have any interest herein or right hereunder. No claim shall be made or be valid either against the Authority or any agent of the Authority and neither the Authority nor any agent of the Authority shall be liable for or be held to pay any money, except as herein provided. The acceptance by the Contractor of the payment as fixed in the final estimate shall operate as and shall be a full and complete release of the Authority and of every agent of the Authority of and from any and all claims, demands, damages and liabilities of, by or to the Contractor for anything done or furnished for or arising out of or relating to or by reason of the Work or for or on account of any act or neglect of the Authority or of an agent of the Authority or of any other person, arising out of, relating to or by reason of the Work, except the claim against the Authority for the unpaid balance, if any there be, of the amounts retained as herein provided.
41. **GUARANTEE.** The Contractor guarantees that the Work and services to be performed under the Contract, and all workmanship, materials and equipment performed, furnished, used or installed in the construction of the same, shall be free from defects and flaws, and shall be performed and furnished in strict accordance with the Drawings, Specifications, and other Contract Documents, that the strength of all parts of all manufactured equipment shall be adequate and as specified and that the performance test requirements of the Contract shall be fulfilled. This guarantee shall be for a period of one year from and after the date of completion and acceptance of the Work as stated in the final estimate. If part of the Work is accepted in accordance with **Para. 34** of this Section entitled, "**Partial Acceptance**," the guarantee for that part of the Work shall be for a period of one year from the date fixed for such acceptance.

Furthermore, if at any time within the said period of guarantee any part of the Work requires repairing, correction or replacement, the Authority may notify the Contractor in writing to make the required repairs, correction, or replacements. If the Contractor neglects to commence making such repairs, correction, or replacements to the satisfaction of the Authority within three (3) days from the date of receipt of such notice, or having commenced fails to prosecute such Work with diligence, the Authority may employ other persons to make the same, and all direct and indirect costs of making said repairs, correction or replacements, including compensation for additional professional services, shall be paid by the Contractor.

42. **RETAIN MONEY FOR REPAIRS.** The Authority may retain out of the moneys otherwise payable to the Contractor hereunder 1% of the amount thereof, and may expend the same, in the manner hereinafter provided, in making such repairs, corrections and replacements in the Work as the Authority, in its sole judgment, may deem necessary.

Furthermore, if at any time within the said period of guarantee any part of the Work requires repairing, correction or replacement, the Authority may notify the Contractor in

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writing to make the required repairs, correction or replacements. If the Contractor neglects to commence making such repairs, correction, or replacements to the satisfaction of the Authority within three (3) days from the date of receipt of such notice, or having commenced fails to prosecute such work with diligence, the Authority may employ other persons to make the same. The Authority shall pay the cost and expense of the same out of the amounts retained for that purpose. Upon the expiration of the said period of guarantee, provided that the Work at that time is in good order, the Contractor will be entitled to receive the whole or such part of the sum last aforesaid, if any, as may remain after the cost and expense of making said repairs, correction or replacements, in the manner aforesaid, have been paid therefrom.

- 43. RETURN OF DRAWINGS.** All Drawings furnished by the Authority or the Engineer to the Contractor may be used only in connection with the prosecution of the Work and shall be returned by the Contractor upon completion of the Work.
- 44. CLEANING UP.** The Contractor at all times shall keep the site of the Work free from rubbish and debris caused by his operations under the Contract. When the Work has been completed, the Contractor shall remove from the site of the Work all of his plant, machinery, tools, construction equipment, temporary work, and surplus materials so as to leave the Work and the site clean and ready for use.
- 45. LEGAL ADDRESS OF CONTRACTOR.** The Contractor's business address and his office at or near the site of the Work are both hereby designated as places to which communications shall be delivered. The depositing of any letter, notice, or other communication in a postpaid wrapper directed to the Contractor's business address in a post office box regularly maintained by the Post Office Department or the delivery at either designated address of any letter, notice, or other communication by mail or otherwise shall be deemed sufficient service thereof upon the Contractor, and the date of such service shall be the date of receipt. The first-named address may be charged at any time by an instrument in writing, executed and acknowledged by the Contractor delivered to the Engineer. Service of any notice, letter, or other communication upon the Contractor personally shall likewise be deemed sufficient service.
- 46. HEADINGS.** The headings or titles of any section, subsection, paragraph, provision, or part of the Contract Documents shall not be deemed to limit or restrict the content, meaning or effect of such section, subsection, paragraph, provision or part.
- 47. MODIFICATION OR TERMINATION.** Except as otherwise expressly provided herein, the Contract may not be modified or terminated except in writing signed by the parties hereto.
- 48. REMEDIES AND ARBITRATION.**
- a. General.** The Contractor's attention is directed to the fact that this Contract is subject to the Public Works Arbitration Act of R.I. General Laws Section 37-16-1 et., seq.
1. Unless otherwise provided in this agreement, all claims, counterclaims, disputes and other matters in question between the Authority and the Contractor arising out of, or relating to, this Agreement or in performance interpretation or breach of it will be decided by arbitration at the election of either party, or in a court of

SECTION 00700

competent jurisdiction within the State in which the Authority is located.

2. Any dispute to be arbitrated shall be done so in accordance with the Construction Industry Arbitration Rules and Regulations of the American Arbitration Association, and judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.
3. However, to the extent allowed by law, if neither party wishes to elect arbitration, and if both parties agree, such claim or controversy may be litigated in a court of competent jurisdiction, as provided in this Agreement. Furthermore, if either party elects to bring such claim or controversy to arbitration, it shall first notify the other party and allow that other party ten (10) calendar days (before filing) within which to have the claim mediated, and shall negotiate in good faith during any such mediation effort.
4. In addition, the method of the appointment of an arbitrator shall vary from the method set forth in Article 13 (Appointment from Panel) of the American Arbitration Association (AAA) Construction Industry Arbitration Rules only so far as that: the AAA shall submit a second, but no further, set of lists should the parties fail to agree upon any of the persons names, or if acceptable arbitrators are unable to act, or if for any other reason the appointment cannot be made from the original submitted lists. If for any reason an appointment cannot be made from the second set of lists, the AAA shall have the power to make the appointment from other members of the Panel without the submission of any additional lists.

49. RIGHTS-OF-WAY and SUSPENSION OF WORK. Land and rights-of-way for the purposes of this Contract will be furnished by the Owner. The Owner will use due diligence in acquiring said land and rights-of-way as speedily as possible. However, it is possible that all lands and rights-of-way may not be obtained as herein contemplated before construction begins, in which event the Contractor shall begin his work upon such land and rights-of-way as the Owner may have previously acquired.

No claim for damages whatsoever will be allowed by reason of the delay in obtaining the remaining lands and rights-of-way. Should the Owner be prevented or enjoined from proceeding with the work or from authorizing its prosecution, either before or after the commencement by reason of any litigation, or by reason of its inability to procure any lands or rights-of-way for the said work, the Contractor shall not be entitled either to make or assert claim for damage by reason of said delay, or to withdraw from the Contract except by consent of the Owner. Time for completion of the work will be extended to such time as the Owner determines will compensate for the time lost by such delay; such determination to be set forth in writing.

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INSURANCE CERTIFICATE

SHEET 1 OF 2

Issued to

The City of Warwick, Rhode Island

This is to certify that this Company, _____,
(Name of Insurance Company) has enforced the following policies covering all work and
operations of _____
(Name of Contractor), as the designated Contractor under a Contract with the City of Warwick,
Rhode Island, as the designated Owner, dated _____,
of said Contract entitled **OAKLAND BEACH FORCE MAIN REHABILITATION, CONTRACT
NO. XXX**

POLICY NUMBER

EFFECTIVE AND

KINDS OF INSURANCE

LIMITS

EXPIRATION DATE

Worker's Compensation
and Employers Liability and
Harbor Workers Coverage *

Number: _____

Effective: _____

Expires: _____

Public Liability including
Contractor's Protective
Personal Injury, Completed
Operations, and Contractual
Liability**

Bodily \$_____ each occurrence
Injury

\$_____ aggregate

Number: _____

Effective: _____

Expires: _____

Property
Damage \$_____ each occurrence
including
C.U.

***Note:

Explosion Collapse

and underground coverage
is provided

Coverage***\$_____ aggregate

Personal
Injury \$_____ aggregate

* Longshoremen's and Harbor Workers' Coverage may be deleted if not required by contract.

** Contractual Liability covers the liability assumed by the Contractor under the subsection entitled "Obligations and Liability of Contractor" of the agreement, as required by subsection entitled "Insurance" of the agreement.

*** Blasting coverage is not required.

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INSURANCE CERTIFICATE
SHEET 2 OF 2
Issued to
The City of Warwick, Rhode Island

Contract Reference: City of Warwick, Rhode Island,
OAKLAND BEACH FORCE MAIN REHABILITATION, CONTRACT NO. XXX

POLICY NUMBER EFFECTIVE AND KINDS OF INSURANCE	LIMITS	EXPIRATION DATE
Automobile Liability including Coverage for hired or borrowed vehicles	Bodily \$ _____ each person Injury _____ each occurrence Property Damage \$ _____ each occurrence	Number: _____ Effective: _____ Expires: _____
Owner's Protective Liability and Property Damage	Bodily \$ _____ each occurrence Injury \$ _____ aggregate Property \$ _____ each occurrence Damage \$ _____ aggregate	Number: _____ Effective: _____

Note: A copy of the Owner's Protective Policy for the City is to be furnished with the completed certificates.

It is agreed that ten (10) days' notice of cancellation or restrictive amendment of said policies shall be mailed to the Authority.

INSURANCE COMPANY

INSURANCE AGENCY

By: _____
AUTHORIZED AGENT OR OFFICER

DATE: _____

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SPECIAL CONDITIONS

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SPECIAL CONDITIONS

1. **FIRST AID TO INJURED.** The Contractor shall keep in his office and ready for immediate use all articles necessary for giving first aid to injured employees. He shall also provide arrangements for the immediate removal and hospital treatment of any employee injured on the work who may require the same.
2. **CONFORMANCE WITH DIRECTIONS.** The Authority may make alterations in the lines, grade, plan form, dimensions or materials of the work, or any part thereof, either before or after the commencement of construction. If such alterations diminish the quantity included in any item of work to be done and paid for at a unit price, the Contractor shall have no claim for damages or for anticipated profits on the work that thus may be dispensed with. If they increase the quantity included in any such item, such increase shall be paid for at the stipulated price.
3. **PROTECTION AGAINST STORMS.** The Contractor shall take all precautions to prevent damage to the work or equipment by storms. The Authority may prohibit the carrying out of any work at any time when in his judgment storm conditions are unfavorable or not suitable, or at any time, regardless of the weather, when proper precautions are not being taken to safeguard previously constructed work or work in progress.

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 Authority may require, at no additional expense to the Authority.

4. **SEQUENCE OF WORK.** The Contractor shall be required to prosecute his work in accordance with a schedule prepared by him in advance and in accordance with additional requirements specified herein and approved by the Authority. The schedule shall be prepared in accordance with the requirements stated in **Para. 21** of the **General Requirements** of these Specifications. Before beginning any portion of the work, the Contractor shall provide the Authority advance notice and ample time for making the necessary preparations.
 - a. **Sequence of Construction.** The Contractor shall submit a Sequence of Construction to the Authority. The sequence shall be organized to connect and make services operational in a timely manner. The following additional general conditions shall apply to all areas of work regarding sequence of construction.
 1. The contractor shall notify the Authority ten (10) days in advance of his intent to begin work on any street. In addition, the contractor shall excavate test pits to locate utilities on all streets prior to starting work. The location and the number of test pits shall be determined by the Authority or the Engineer.
 2. Water and gas shall be relocated and operational prior to installing sewer pipe in any particular street.

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3. The Contractor shall prepare and submit designs, prepared and stamped by a Professional Engineer registered in the State of Rhode Island, for the traffic control plans, all earth support and dewatering systems, all of which shall be submitted three weeks prior to working in areas requiring same.
5. **COMPETENT HELP TO BE EMPLOYED.** The Contractor shall employ experienced foremen, craftsmen and other workmen competent in the work in which they are to be engaged.
6. **LIGHTS, BARRIERS, WATCHMEN AND INDEMNITY.** The Contractor shall put up and maintain such barriers, lighting and warning signals and signs that will prevent accident during the construction work and protect the work and insure the safety of personnel and the public at all times and places; and the Contractor shall indemnify and protect the Authority and the Engineers in every respect from any injury or damage whatsoever caused by any act or neglect of the Contractor or his subcontractors, or their servants or agents.

In addition to the above, when and as necessary, or when required by the Authority, the Contractor shall post signs and employ watchmen or flag men for the direction of traffic at the site and for excluding at all times unauthorized persons from the work, for which the Contractor will not be paid additional compensation.

The Contractor shall be responsible for excluding at all times from lands within easement areas, all persons not directly connected with the work or unauthorized by the Authority to be in the work areas.

7. **NIGHT WORK, SATURDAYS, SUNDAYS & LEGAL HOLIDAYS.** Night work or work on Saturdays, Sundays or legal holidays requiring the presence of an Engineer or inspector, will not be permissible except with the approval of the Authority. Should it be desired or required by the Authority to operate an organization for continuous night work or for emergency night work, the lighting, safety and other facilities which are deemed necessary by the Authority for performing such night work shall be provided by the Contractor. For night work, work on Saturdays, Sundays or legal holidays, if any be performed, the Contractor will receive no extra payment, and he shall compensate the Authority at cost for inspection services and police details furnished during these periods.
8. **WORK IN COLD WEATHER.** The Authority may determine when conditions are unfavorable for work and may order the work or any portion of it suspended whenever, in his opinion, the conditions are not such as will insure first class work. Except for Winter Shutdown, as specified in **Para. 39** of the **Information for Bidders** section of these Specifications, work shall be prosecuted throughout the year and the Contractor will be expected to keep work going and employment of labor as continuous as possible.

All methods and materials used for concrete or masonry work in cold weather shall be subject to the approval of the Engineer. The Contractor shall take the necessary precautions to protect the work from damage and for removing ice and frost from materials, including heating the water, sand and coarse aggregate and for protecting the newly laid masonry. This protection shall also include the covering of work with tarpaulins and the heating by salamanders or steam pipes or other suitable method.

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The Contractor will receive no extra payment for any labor, apparatus, tools or materials necessary to comply with the above requirements, but compensation shall be considered to be included in the prices stipulated for the appropriate items of work as listed in the bid.

9. **BLASTING AND EXPLOSIVES.**

a. General. Blasting under this Contract is restricted to areas where the Contractor can show that no damage will occur to any dwelling, structure, or utility. Blasting will not be allowed within 600 feet of a dwelling or structure. The Contractor shall comply with all the laws and ordinances, as well as with Title 29 and Title 30 of the Code of Federal Regulations, and the Safety and Health Regulations for Construction of OSHA, whichever is the most restrictive, in the use, handling, loading, transportation, and storage of explosives and blasting agents. All operations involving explosives and/or blasting agents shall be in accordance with the following:

1. The 2001 Edition of the NFTA 495 Explosive Materials Code as published by the National Fire Protection Association.
2. The Rhode Island Comprehensive Fire Safety Act of 2003.

This Code and Legislative Act are hereby made part of these Specifications by reference. Wherever this Code and Act conflict with these Specifications, the former shall apply.

b. Blasting Precautions. The following paragraphs set out the criteria for safely conducting blasting operation.

1. In the rock excavation it is especially required that the blasting shall be conducted with all possible care in order to avoid injury to persons and property. The rock shall be well covered and a sufficient warning shall be given to all persons in the vicinity of the work before blasting.
2. The explosives used shall be of such power and placed in such quantities and positions that will not make the excavation unduly large nor shatter unnecessarily the rock upon or against which the work is to be installed nor injure the work already in place. Where masonry is to be built against the rock, all loose or shattered rock shall be completely removed so the masonry can be built firmly in contact with the solid rock.
3. Explosives must be carefully transported, stored, handled and used as required by Federal laws (Occupational Safety and Health Act), the several local and State ordinances and laws, the necessary permits for such transportation, storage, handling and use shall be obtained by the Contractor who shall show such permits to the Authority before any blasting will be allowed. The Contractor shall keep on the job only such quantity of explosives as may be needed for the work underway and only during such time as they are being used. Explosives shall be stored in a secure manner and separately from all tools. Caps or detonators shall be stored separately and at a point over 100 feet distant from the explosives. Receptacles especially constructed for use in the storage of explosives shall be provided for the storage of explosives and they shall be

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proofed against bullets, fire or other conditions which might cause explosion of the contents. When the need for explosives is ended, all such material remaining on the job shall be promptly removed from the premises.

4. Under any circumstances, the approval of the Authority and Fire Marshall shall first be obtained before blasting is permitted and where, in the opinion of the Authority, blasting is unsafe or dangerous to persons or to existing structures and utilities, the Contractor shall employ pneumatic tools, drilling and splitting mechanically or by hand or by other means not requiring the use of explosives for the removal of rock, boulders or ledge, at no additional expense to the Authority.
5. The Contractor shall conduct a pre-blasting survey of all structures within a 600-foot radius of the blast site. This survey will include a visual inspection supplemented with photographs and/or video. The survey should be summarized in a report prepared and submitted at least 10 days prior to any blasting.
6. The Contractor shall submit a blasting plan. The blasting plan shall include the following:
 - (a) Method of blasting, delay pattern, explosive type, type of blasting cover, and rock excavation method.
 - (b) Diameter, spacing, burden, depth, pattern, and inclination of blast holes.
 - (c) Type, strength, amount (weight) of explosive used in each hole on each delay and the total for each blast.
 - (d) Type, sequence and number of delays and delay pattern.
7. Before any explosives, such as dynamite or detonator caps, are stored or used at the site or sites of construction under this Contract, the Contractor shall contact the local Police Department for instructions relative to local regulations for possession and use of explosives. The Contractor shall obtain all required permits or licenses for possession and use of explosives on the site or sites of construction under this Contract. In addition, the Contractor shall be responsible:
 - (a) To provide a licensed explosives expert who shall supervise the drilling and blasting and be responsible for the explosive materials at all times.
 - (b) For the keeping of records which shall show by date the explosive materials delivered on the site or sites of construction, the explosive materials used for construction and the explosive materials removed from the site or sites of construction under this Contract.
 - (c) For the non-storage of explosive materials overnight on the site or sites of construction under this Contract.

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- (d) For the immediate reporting to the local Police Department all unaccounted-for explosive materials.
8. All records relating to the possession and use of explosive materials under this Contract shall be open to inspection by the local Police Department at any time.
 9. The use of explosives on State owned and privately owned properties shall be subject to all additional requirements as may be required by the above-mentioned property owners.
 10. The Contractor shall prepare a log for each blast. The log should include the date, firing time, name of person in responsible charge, type and strength of explosive, blasting caps and delays, total explosive used, measured peak particle velocity, and name and signature of person in responsible charge.
 11. The Contractor shall notify all residents within a 600-foot radius of blasting to be performed each day. All complaints received by the Contractor will be reported to the Engineer.
 12. In addition to other requirements specified, and all other necessary or required precautionary measures, the Contractor shall be held responsible for completely, adequately and carefully covering all blasts with suitable blasting mats in such a manner as to prevent damage to landscape features, structures, facilities or other surrounding objects and in a manner that will prevent injury to persons.
 13. The use of the maximum number of drill holes, together with minimum quantities of explosives in each drill hole and utilizing split-second delayed caps is the preferable method of accomplishing the blasting operations in conjunction with rock excavation.
 14. The Contractor shall perform the blasting in such a manner to protect nearby structures and utilities from damage. All construction-induced damage will be repaired by the Contractor at no additional expense to the Authority. For each blast the Contractor shall perform seismographic monitoring to measure peak particle velocity at the closest structure. All blasting shall be completed in such a manner that the peak particle velocity is limited to less than that indicated on Figure SC-1 on or near the closest structure. Figure SC-1 is located at the end of this Section.
 15. Unless specifically permitted, no blasting shall be done between the hours of sunset and sunrise on any day and no blasting will be allowed on Sundays or legal holidays.
 16. In the event that any provisions in this **Paragraph 9** are contrary to or inconsistent with the above referred to Occupational Safety and Health Act, the provisions of the Occupational Safety and Health Act shall prevail.
10. **AS-BUILT DRAWINGS**. Preparation of AS-BUILT DRAWINGS shall be the responsibility of the engineering firm providing construction inspection services and are not part of this construction contract.

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11. **PROTECTION OF TREES.** The Contractor shall take special care to preserve and protect from injury all trees located outside the limit lines of construction, and no such trees shall be cut down, trimmed or otherwise cut without permission from the Authority.
12. **WORK BY OTHERS.** The Authority reserves the right to do any other work which may connect with, or become a part of, or be adjacent to the work embraced by this Contract, at any time, by contract work or otherwise. The Contractor shall not interfere with or obstruct in any way the work of such other persons as the Authority may employ, and shall execute his own work in such manner as to aid in the executing of work by others as may be required. No backfilling of trenches or excavations will be permitted until such work by the Authority is completed.
13. **SECTION REMOVED.**
14. **SECTION REMOVED.**
15. **ELECTRICAL ENERGY.** The Contractor shall make all necessary applications and arrangements and pay all fees and charges 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. Furthermore, the Contractor shall provide sufficient electric lighting so that all work may be done in a workmanlike manner when there is not sufficient daylight.
16. **INTERFERENCE WITH AND PROTECTION OF STREETS.**
 - a. **General.** The following paragraphs establish provisions for the protection and maintenance of streets.

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1. The Contractor shall not close or obstruct any portion of a street, road, or private way without obtaining permits therefore from the proper authorities. If any street, road 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 proper authorities.
 2. Streets, roads, private ways, and walks not closed shall be maintained passable and safe by the Contractor, who shall assume and have full responsibility for the adequacy and safety of provision made therefore.
 3. The Contractor shall, at least 48 hours in advance, notify the Police and Fire Department in writing, with a copy to the Engineer, if the closure of a street or road is necessary. He shall cooperate with the Police Department in the establishment of alternate routes and shall provide adequate detour signs, plainly marked and well lighted, in order to minimize confusion. Overnight roadway closures will not be allowed.
 4. The Contractor shall erect substantial barriers at the ends of open ditches, shall erect warning signs, and shall provide adequate lights or flares to guard the barriers, trenches, and excavation.
 5. The Contractor shall take steps to protect the road structure from damage by tracked and heavy equipment during construction. Repairs to the road structure outside of the pay limits shown on the drawings shall be the responsibility of the Contractor. These repairs shall be done at no additional cost to the Authority.
- 17. PIPE LOCATION.** Pipelines shall be located substantially as indicated on the Plans. However, the Authority, acting through the Engineer, reserves the right to revise any such location as may be required to avoid interference with existing facilities of whatever kind.
- 18. DELETION OF WORK.** The Authority reserves the right to delete portions of the work within this Contract to comply with financing limitations or for other good and valid reason. In such instances, adjustment in compensation to the Contractor will be made in accordance with **Section 24, CHANGES**, in the **General Conditions** of these Specifications.
- 19. USE OF PREMISES AND REMOVAL OF DEBRIS.**
- a. **General.** The Contractor agrees to undertake the following tasks at his own expense.
 1. To take every precaution against injuries to persons or damage to property;
 2. To store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other contractors;
 3. To place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work;

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4. To clean up frequently all refuse, rubbish, scrap materials and debris caused by his operations, to the end that at all times the site of the work shall present a neat, orderly and workmanlike appearance;
5. Before final payment to remove all surplus material, falsework, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, and to put the site in a neat, orderly condition;
6. Should the Contractor fail or neglect, after backfilling, to promptly remove all surplus materials, tools and other incidentals, or promptly do the required repaving when ordered, the Authority may, after 24 hours' notice, cause the work to be done and the cost thereof shall be deducted from any monies then or thereafter due the Contractor;
7. To affect all cutting, fitting or patching of his work required to make the same to conform to the plans and specifications and, except with the consent of the Engineer, not to cut or otherwise alter the work of any other contractor.
8. Prevent accumulation of dirt, rocks, and construction materials from the performance of work under this contract on road surfaces. The Contractor shall promptly remove any accumulation of materials from the road surface at no additional cost to the Authority.

20. PRICE ADJUSTMENT – LIQUID ASPHALT AND DIESEL FUEL: The intent of this provision is to insure adequate and fair compensation for unpredictable and fluctuating costs which, from time to time, occur in the prices of Liquid Asphalt and Diesel Fuel. The price adjustment provisions are made part of the Contract to assure more realistic bidding and encourage competition.

The base price is the unit price of the material (FOB Terminal), as determined by the WSA through the RIDOT, just prior to the project bid date.

The period price is the unit price of the material (FOB Terminal), as determined by the WSA through the RIDOT, for any one-month period following the bid date during which the price varies from the base price.

Price adjustment will be determined by the difference between the Period Price and the Base Price. Price adjustments will only be made at the end of each month during which; a), work was accomplished on the project; and b), prices increase by 15% or more. Price adjustments will not be allowed beyond the completion date of the Contract or an approved extension thereof.

Liquid Asphalt Cement: The asphalt content will be the optimum amount used in every ton of bituminous concrete mixture, as determined by the RIDOT Standard Specifications.

The Price Adjustment will be determined by multiplying the total weight of liquid asphalt, in tons, by the difference between the base price and period price.

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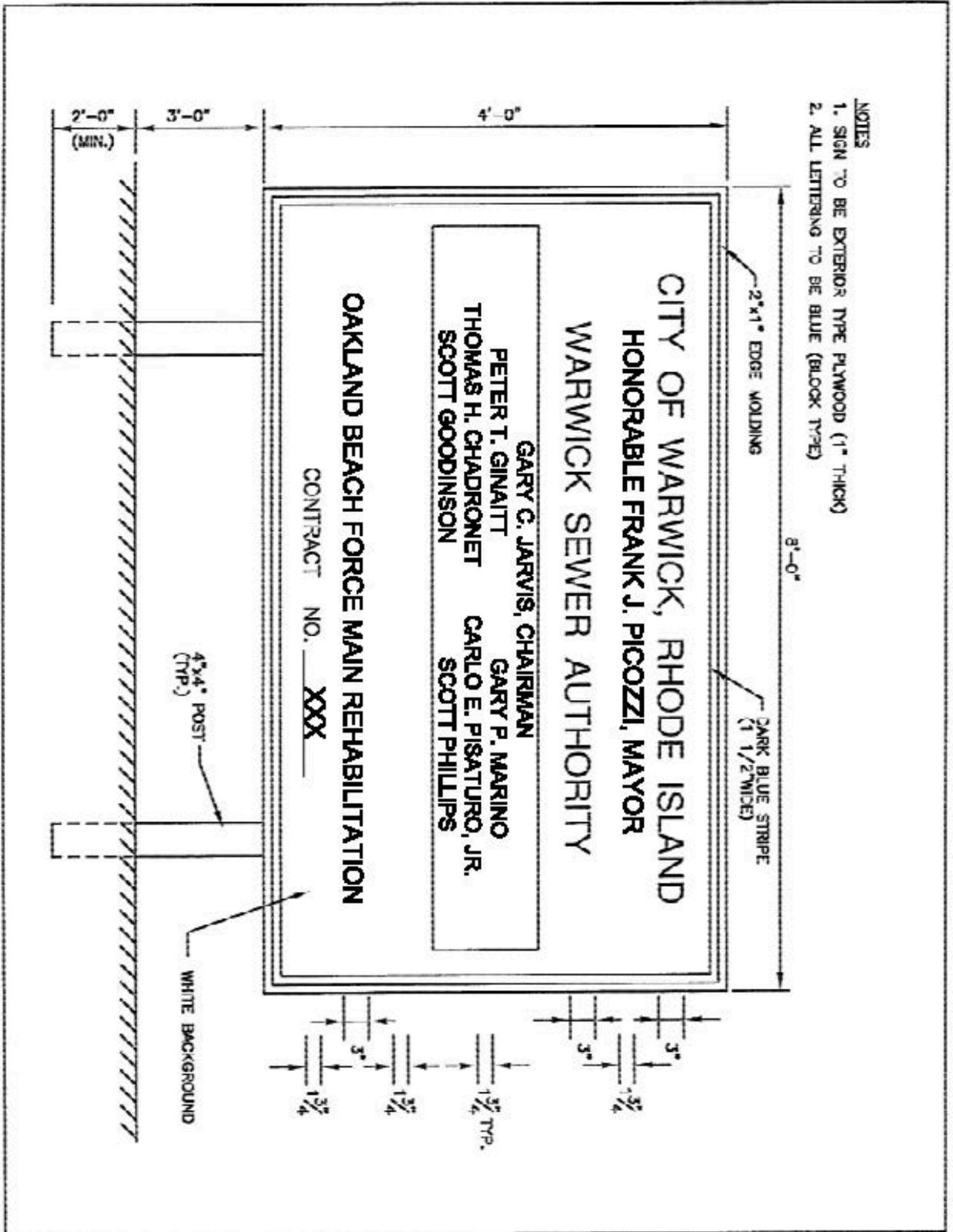
Diesel Fuel: The fuel for operating the plant, and for hauling and placing bituminous concrete, will equal the total number of tons of bituminous concrete placed during the month in question times a fuel adjustment factor of 2.5 gallons of fuel per ton of bituminous concrete. Tonnage of bituminous concrete placed during the month in question will equal the sum of the weights indicated on the Daily Automated Recordation printout slips provided at the plant.

The Price Adjustment will be determined by multiplying the total volume of fuel, in gallons, by the difference between the base price and the period price.

No price adjustment will be made for liquid asphalt or diesel fuel unless the amount of the adjustment exceeds \$500.00 and deviates more than 15% from the bid price for the month.

All price adjustment requests must be made at the end of every billing cycle for all increases incurred during that same billing cycle. Failure to submit for additional monies resulting from an increase in price to liquid asphalt or diesel fuel at the end of a billing cycle will result in forfeiture of said monies due for that billing cycle.

- 21. PROJECT IDENTIFICATION SIGNS & DETAILS:** The Contractor shall provide, erect, and maintain in good condition two (2) project identification signs at locations on the project site designated by the Authority. The signs shall be erected within twenty-one (21) days after the construction Contract is awarded and, in any event, prior to the start of construction operations. The design and construction standards of both signs are presented on the pages following these Special Conditions. The cost of providing the signs shall not be paid for separately but shall be included in the per each bid price submitted for Item No.1.





**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

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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.

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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.

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- 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

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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)

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.

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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

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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

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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.

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(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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37-14.1-8.	Sanctions.

37-14.1-1. Purpose.

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

37-14.1-2. Applicability.

This chapter shall apply to any and all state purchasing, including, but not limited to the procurement of goods 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.

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- (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.

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"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;

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- (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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37-16-26.	Satisfaction of award.
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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.

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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.

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(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.

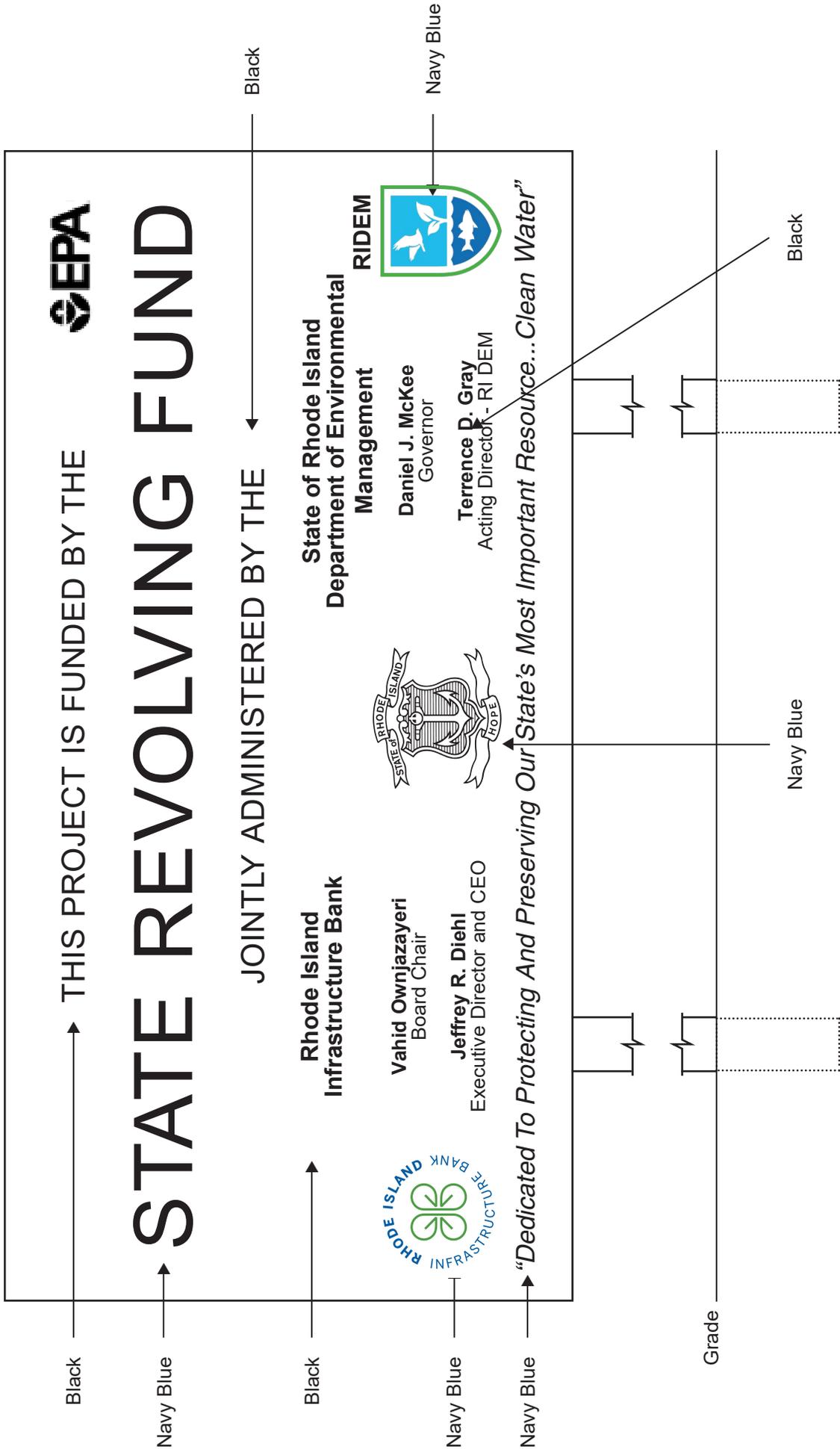
The procurement of the service of an attorney, physician or dentist by a municipality, is exempt from the provisions of this chapter.

45-55-15. Severability.

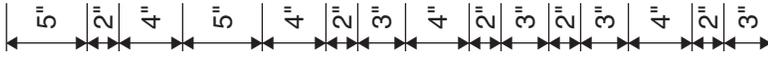
If any one or more sections, clauses, sentences or parts of this chapter are for any reason be adjudged unconstitutional or otherwise invalid in any court, that judgment shall not affect, impair or invalidate the remaining provisions of this chapter but shall be confined in its operation to the specific 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.



8' - 0"



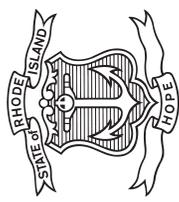
THIS PROJECT IS FUNDED BY THE



STATE REVOLVING FUND

JOINTLY ADMINISTERED BY THE

**Rhode Island
Infrastructure Bank**



Vahid Ownjazayeri
Board Chair
Jeffrey R. Diehl
Executive Director and CEO

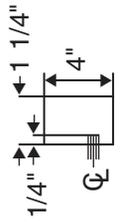
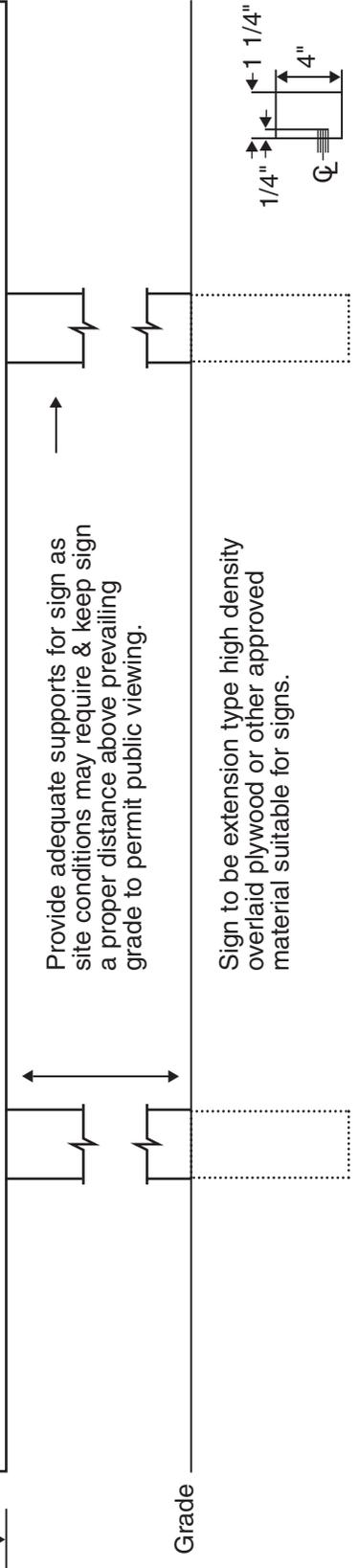
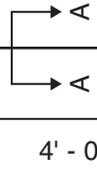
**State of Rhode Island
Department of Environmental
Management**



Daniel J. McKee
Governor
Terrence D. Gray
Acting Director - RIDEM



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





**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.



OMB Control No: 2090-0030
 Approved: 8/13/2013
 Approval Expires: 8/31/2015

**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.



**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.



OMB Control No: 2090-0030
 Approved: 8/13/2013
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**Disadvantaged Business Enterprise (DBE) Program
 DBE Subcontractor Participation Form**

Please use the space below to report any concerns regarding the above EPA-funded project:

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 contractor's 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: ___ DOT ___ SBA ___ Other: _____		Meets/ exceeds EPA certification standards? ___ YES ___ NO ___ 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.

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

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.

SECTION 00800

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

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

**KIRSTEN
ANDERER**

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Date: 2020.12.11 07:55:52
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Michael Deane, Branch Chief
State Revolving Fund Branch, OWM

MICHAEL DEANE

Digitally signed by MICHAEL
DEANE
Date: 2020.12.11 17:56:38 -05'00'

TO: SRF Branch Chiefs
Regions 1-10

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

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

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

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

Applicability in the State Revolving Fund (SRF) Programs

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

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

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

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



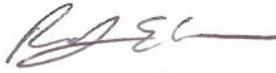
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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: For Andrew D. Sawyers, Director 
Office of Wastewater Management (4201M)

Peter C. Grevatt, Director 
Office of Ground Water and Drinking Water (4601M)

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 zees. 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 <ul style="list-style-type: none"> • Does the waiver request include 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 – 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 <ul style="list-style-type: none"> • 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? <ul style="list-style-type: none"> – 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: <ul style="list-style-type: none"> – 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

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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 (XXXXXXXXXXXX)

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

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:

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(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

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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>.

SECTION 01000

DIVISION 01000
GENERAL REQUIREMENTS

SECTION 01000

GENERAL REQUIREMENTS

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100.0 GENERAL REQUIREMENTS

100.1 **PROJECT LOCATION.** Oakland Beach, City of Warwick, Rhode Island.

100.2 **DRAWING INDEX.**

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8	CIPP PHASE-3
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100.3 DEFINITIONS. The following terms and definitions refer to this specific project.

- A. **Name of Project.** Oakland Beach Force Main Rehabilitation, **Contract No. XXX.**
- B. **Engineer.** The word "Engineer" shall mean the person or persons, partnership or corporation holding the position or acting in the capacity of Engineer for the owner in respect to this contract, whether acting directly or through his properly authorized agents, such agents acting only within the scope of the particular duties entrusted to them. The Engineer designated is the corporation of Garofalo & Associates, Inc., 85 Corliss Street, P.O. Box 6145, Providence, Rhode Island, 02940.

100.4 SCOPE OF WORK. This project consists of rehabilitating an 8,373-foot asbestos-cement (AC) force main that currently serves the Oakland Beach area within the City of Warwick, Rhode Island. The existing force main will be rehabilitated in its entirety using Cured-in-Place Pipe (CIPP) rehabilitation methods from the Oakland Beach Pump Station to the interceptor structure located at the intersection of West Shore Road and Albert Road.

Rehabilitation work will consist of cleaning, inspecting and preparing the existing force main, structures and appurtenances, temporary bypass operations, installation of Cured-in-Place Pipe (CIPP) liner; paving, and all appurtenant construction and details, complete.

100.5 OWNER'S PROTECTIVE LIABILITY AND PROPERTY DAMAGE INSURANCE. In addition to and in the same amounts of the Contractor's Public Liability and Property Damage Insurance specified in the General Conditions the Contractor shall procure and shall maintain during the life of this contract an insurance policy written in the name of the City of Warwick, Rhode Island and extended to include the interests of Garofalo & Associates, Inc., Professional Engineers and an inspection company to be determined, to protect the City, its employees and Garofalo & Associates, Inc. and its employees, from any liability which might be incurred against them as a result of any operations of the Contractor or his subcontractors or their employees.

100.6 HAULING, HANDLING AND STORAGE OF MATERIALS. The Contractor shall, at his own expense, handle and haul all materials furnished by him and shall remove any of his surplus materials at the completion of the work. The Contractor shall provide suitable and adequate storage for equipment and materials furnished by him that are liable to injury and shall be responsible for any loss of or damage to any equipment or materials by theft, breakage, or otherwise. The Contractor shall be responsible for all damages to the work under construction during its progress and until final completion and acceptance even though partial payments have been made under the Contract.

100.7 OPEN EXCAVATIONS. All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights and other means to prevent accidents to persons, and damage to property. The Contractor shall, at his own expense, provide suitable and safe means for completely covering all open excavations and for accommodating travel when work is not in progress. Bridges provided for access to private property during construction shall be removed when no longer required. The length of open trench will be controlled by the particular surrounding conditions, but shall always be confined to the limits prescribed by the Engineer.

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If the excavation becomes a hazard, or if it excessively restricts traffic at any point, then special construction procedures shall be taken, such as limiting the length of trench and prohibiting stacking excavated material in the street.

100.8 REJECTED MATERIALS AND DEFECTIVE WORK. Materials furnished by the Contractor and condemned by the Engineer as unsuitable or not in conformity with the specifications shall forthwith be removed from the work by the Contractor, and shall not be made use of elsewhere in the work. Any errors, defects or omissions in the execution of the work or in the materials furnished by the Contractor, even though they may have been passed or overlooked or have appeared after the completion of the work, discovered at any time before the final payment is made hereunder, shall be forthwith rectified and made good by and at the expense of the Contractor and in a manner satisfactory to the Engineer. The Contractor shall reimburse the Authority for any expense, losses or damages incurred in consequence of any defect, error, omission or act of the Contractor or his employees as determined by the Engineer, occurring previous to the final payment.

100.9 SAFETY AND HEALTH REGULATIONS. This project is subject to all of the Safety and Health Regulations (CFR 29 Part 1926 as amended) as promulgated by the U.S. Department of Labor on June 24, 1974. Contractors are urged to make themselves familiar with the requirements of these regulations.

100.10 MAINTENANCE OF DRAINAGE FACILITIES. All existing drainage facilities including, but not limited to, brooks, streams, canals, channels, ditches, culverts, catch basins and drainage pipings shall be adequately safeguarded so as not to impede drainage or to cause siltation of downstream areas in any manner whatsoever. If the Contractor damages or impairs through circumstances beyond his control any of the aforesaid drainage facilities, he shall repair the same within the same day. Pipe replacement shall be in kind.

100.11 SHOP DRAWINGS.

A. General. Shop drawings shall be submitted within 30 days of contract award to ensure that the Contractor's approved schedule is not adversely impacted by the submittal process. Shop drawings shall consist of such detailed plans required to control the work that are not included in the Plans furnished by the Authority.

Shop drawings shall identify details by reference to sheet and detail numbers shown on Contract Drawings. Use the same symbols wherever practicable. Reproductions of Contract Drawings are acceptable as shop drawings only when specifically authorized in writing by the Engineer.

B. Submission Requirements. Submittals shall be made with a letter of transmittal to the Engineer by the Contractor, and NOT by subcontractors, suppliers or manufacturers. The Contractor shall submit six (6) sets of shop drawings to the Engineer. Shop drawings shall be accompanied by six (6) sets of design computations, cuts from manufacturers' catalogs, and/or supporting technical bulletins. The Engineer will return the shop drawings stamped with approval or note exceptions. All engineering shop drawings and design computations shall be stamped by a Rhode Island Registered Professional Engineer.

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C. **Required Shop Drawings.** Shop drawings will be required for the following items of work:

1. Detailed procedure, materials and list of equipment to be used in the installation of structural CIPP liner.
2. Detailed procedure, materials and list of equipment to be used for temporary bypass pumping operations.
3. Precast Sanitary Sewer Manholes and Covers
4. Pressure Sewer System Components (Fittings, Valves, etc.)
5. All aggregate material to be used for construction (pipe bedding, subgrade, etc.)
6. Bituminous concrete asphalt mix
7. Dewatering Plan
8. Earth Retention Design and Monitoring

100.12 WATER FOR CONSTRUCTION PURPOSES. The Contractor will be required to supply himself with water for jetting. If obtained from the City of Warwick, regulations of the City with regard to procuring, using, and paying for water jetting used for any purpose must be strictly complied with.

100.13 COORDINATION WITH UTILITIES. The Contractor shall notify "Dig Safe" at least fourteen (14) days in advance of his proposed date of start of work in any areas where utilities may be affected. In addition to "Dig Safe" the Contractor shall also notify the Warwick Water Department and the Kent County Water Authority at least fourteen (14) days in advance of his proposed date of start of work in any areas where utilities may be affected. The Contractor is advised that underground utilities have associated service connections for water, gas, telephone, electric, fire alarm, cable, etc. These service connections are not shown on the Plans, but shall be located prior to excavation as indicated. The contractor is reminded that the Warwick Water Department is not a member of Dig Safe.

The Contractor shall coordinate all work involving utilities and shall satisfy himself as to the existing conditions of the areas in which he is to perform his work. He shall conduct and arrange his work so as not to impede or interfere with the work of other contractors working in the same or adjacent areas. The Contractor shall also be responsible for coordinating any and all work performed by his subcontractors.

Finally, the Contractor shall coordinate all work with the Gas Company, (National Grid). A two (2) day advance notice for relocating an existing gas service as required by National Grid. This work will be done at a minimum cost of \$1,000 per service or on a time and materials basis by National Grid for the Contractor. The cost for relocating the service will be billed directly to the Authority, and, in turn, be deducted from the Contractor's monthly progress payment.

100.14 DESIGN OF EQUIPMENT. If other equipment is submitted for approval other than that which is called for, the Contractor shall prepare and submit for approval at his expense, detailed structural, mechanical and electrical drawings, equipment list, maintenance requirements, and any other data required by the Engineer, showing all necessary changes and embodying all special features of the equipment he proposes to furnish. Such changes, if approved, shall be made at the expense of the Contractor.

In addition, the Contractor shall reimburse the Authority for all changes by the Engineer for costs,

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including reasonable profits, incurred by the Engineer in reviewing changes to the design requested by the Contractor. Reimbursement to the Authority shall be made regardless of the decision of the Engineer to approve or disapprove the proposed changes. The reimbursement to the Authority shall be made in the form of a credit to monthly invoices.

100.15 SERVICES OF MANUFACTURER'S REPRESENTATIVE.

A. General. The Contractor shall arrange for a qualified service representative from the company manufacturing or supplying certain equipment as indicated in the detailed specifications to perform the duties described herein.

B. Inspection by Representative. After installation of the listed equipment has been completed and the equipment is presumably ready for operation, but before it is operated by others, the representative shall inspect, operate, test, and adjust the equipment. The inspection shall include, but not be limited to, the following points as applicable:

1. Soundness (without cracked or otherwise damaged parts).
2. Completeness in all details, as specified.
3. Correctness of setting, alignment, and relative arrangement of various parts.
4. Adequacy and correctness of packing, sealing and lubricants.

The operation, testing and adjustment shall be as required to prove that the equipment is left in proper condition for satisfactory operation under the conditions specified.

C. Completion of Work by Representative. On completion of his work, the manufacturer or supplier representative shall submit in triplicate to the Engineer a complete signed report of the results of his inspection, operation, adjustments and tests. The report shall include detailed descriptions of the points inspected, tests and adjustments made, quantitative results obtained, if such are specified, and suggestions for precautions to be taken to ensure proper maintenance. The report shall also include a certificate that the equipment conforms to the requirements of the Contract and is ready for permanent operation, and that nothing in the installation will render the manufacturer's warranty null and void.

After the Engineer has reviewed the reports from the manufacturer's representative, the Contractor shall make arrangements to have the manufacturer's representatives present when the field acceptance tests are made.

100.16 DISCHARGE OF DEWATERING OPERATIONS. Any water that is pumped and discharged from an excavation as part of the Contractor's water handling shall be filtered by an approved method prior to its discharge into a receiving water.

The pumped water may be filtered through baled hay, a vegetative filter strip or a vegetative channel to trap sediment occurring as a result of the construction operations. The channel shall be such so that the discharge flow rate shall not exceed a velocity of more than 1 foot per second. The sediment shall be cleared from the channel periodically. Direct discharge onto road surfaces without treatment and removal of sediment will not be permitted. Failure to perform and to prevent the discharge of sediments will result in the immediate suspension of work and until conditions are corrected to the satisfaction of the Engineer and Owner.

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Any water discharged from dewatering operations must be at least equal in quality to the quality of the receiving water. If in the opinion of the Engineer the quality of the water discharged from dewatering operations is unacceptable, the Contractor shall employ whatever measures necessary to provide an acceptable water quality. All work shall be performed in accordance with the Rhode Island Erosion Control & Sediment Control Handbook.

100.17 PRE-BID CONFERENCE. All interested parties are required to attend a pre-bid conference at the time and place designated in the Notice to Contractors.

100.18 PRE-CONSTRUCTION CONFERENCE. The Contractor is required to attend a pre-construction conference at the time and place designated by the Authority. The main items of discussion will be the Contractor's construction schedule, proposed superintendent, Professional Engineer or Land Surveyor employed for layout of the work, record drawings, etc.

100.19 JOB SITE PROGRESS MEETINGS. The Contractor shall conduct periodic job site meetings at intervals to be determined at the preconstruction conference, for the purpose of reviewing, scheduling and coordinating project progress, as well as other matters of general interest to the project. The Contractor shall notify the Engineer and all major subcontractors involved in work to be discussed at each meeting. The Contractor shall maintain a written record of the minutes of each meeting, and make record available for review by any person attending each meeting, and by the Engineer and Authority whether or not present at any meeting.

100.20 PROJECT CLOSE-OUT MEETING. Prior to processing of the final payment request and acceptance of the work, the Contractor shall attend such meeting and accompany the Authority of final inspection tour of the work. Discrepancies noted shall be recorded on a "punch list" and remedied to the satisfaction of the Authority. Upon acceptance by the Authority, the one-year project guarantee period shall commence.

100.21 CONSTRUCTION SCHEDULE. Within ten days after the effective date of the Agreement, the Contractor shall submit to the Engineer, for review and acceptance, an estimated progress schedule indicating the starting and completion dates of the various stages of the Work, a preliminary schedule of Shop drawing submissions, and a preliminary schedule of values of the Work. The Contractor shall also submit periodic updates as necessary to reflect any deviations of actual progress from the initial schedule.

The schedule shall be prepared in a format approved by the Engineer and compatible with complexity of the project to adequately illustrate the relationship of major work activities.

Minimum requirements will be a horizontal bar chart on monthly time scale indicating the schedule for work including a timeline for lateral pipe, service connections, temporary pavement, and final pavement of each street.

100.22 INSURANCE CERTIFICATES. Refer to **Section 6; Insurance**, of the **General Conditions**, for certificate requirements.

100.23 PROJECT DATA SUBMITTAL SCHEDULE. The Contractor shall provide a list of all anticipated submittals of project data as required by the Contract Documents and construction schedule and such additional data as may be deemed necessary by the Contractor. Show proposed submittal dates for each to allow scheduling by Engineer for expediting review. This list will be incorporated into the project target schedule with updates being done as part of the schedule update. Additional updates will be done at closer time intervals if requested and in so doing has a

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benefit in managing the project.

100.24 PAYMENT REQUESTS. Refer to **Section 33; Progress Estimates**, of the **General Conditions** for regular progress payments on the Contract. Where payment is to be based on unit bid prices, correlate payment request with the schedule of bid items. If separate payment is to be requested for materials suitably stored but not installed, segregate delivered costs, including taxes from installation costs including overhead and profit; show proper security of materials and insurance.

100.25 SAMPLES AND PRODUCT DATA.

A. General. Submittals on component parts forming a system, or that are interrelated, shall be submitted at one time as a single submittal in order to demonstrate that the items have been properly coordinated and will function as a unit.

B. Samples. Submittal of samples shall include all required physical examples to illustrate materials, equipment or workmanship which establishes standards by which completed work is judged. Samples must be of sufficient size and clarity, and in sufficient quantity to clearly illustrate functional characteristics and full range of colors, patterns, textures or other properties which will be actually produced.

C. Product Data. Submittal of product data shall include manufacturer's schematic drawings, catalog sheets, brochures, diagrams, schedules, performance charts, illustrations, test reports, certificates of compliance, and other descriptive data not included on shop drawings.

The Contractor shall modify standard descriptive data to delete information which is not applicable, and clearly identify pertinent data.

D. Submission Requirements. Submittals shall be made with a letter of transmittal to the Engineer by the Contractor, and not by subcontractors, suppliers or manufacturers. The Contractor shall review all submittals and certify same for conformance with contract requirements as set forth in other sections of these Specifications. A 3" x 3" minimum space shall be provided on the certification sheet for the Engineer's review stamp. The Contractor shall:

1. Submit samples in number specified, or if not so specified, in triplicate.
2. Submit Project Data in six sets for required distribution and record.
3. Identify all submittals with the following information, as applicable:
 - (a) Project title and Engineer's project number.
 - (b) Name of Contractor, Engineer, originating subcontractor or supplier.
 - (c) Submittal date, and all revision dates.
 - (d) Identification of product or material by name and specification section number.

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100.26 TAX CERTIFICATES. Purchases made by the City of Warwick, Rhode Island are considered exempt from payment of Federal excise taxes, Rhode Island sales taxes, etc.

100.27 PROJECT RECORD DOCUMENTS.

A. Maintenance of Documents. The Contractor shall maintain at job site one record copy of Contract Drawings, Specifications, Addenda, Approved Shop Drawings, Change Orders, other modifications to the Contract, field test records and other approved documents submitted by Contractor in compliance with specification requirements.

The Contractor shall maintain documents at the Project apart from documents used for construction; shall not use record documents for construction purposes; and shall maintain documents in clean, legible condition. The Contractor shall also make documents available at all times for inspection of the Engineer and the Authority.

B. Recording. The Contractor shall label each document "PROJECT RECORD COPY" in 2-inch-high printed letters; keep record documents current; and not permanently conceal any work until required information has been recorded.

C. Contract Drawings. The Contractor shall legibly mark up each drawing to record, where applicable. Mark-ups shall include:

1. Horizontal and vertical location of service connections, underground utilities and appurtenances referenced to permanent surface features.
2. Field changes of dimension and detail made during construction process.
3. Changes made by Change Order or Field Orders.
4. Details not on original Contract Drawings.

D. Specifications and Addenda. The Contractor shall legibly mark up each section to include:

1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
2. Changes made by Change Order or Field Order.
3. Other matters not originally specified.

E. Shop Drawings. Shop drawings shall be maintained as record drawings. The Contractor shall legibly annotate shop drawings to record changes made after review. Red felt tip marking pens shall be used for all recording.

100.28 RECORD DRAWINGS. The engineering firm responsible for construction inspection shall prepare **as-built drawings**. Accordingly, **as-builts** are not part of this Contract.

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100.29 TESTS AND INSPECTIONS. The Contractor shall assist and facilitate the testing consultant, employed by the Authority, to perform specified services for the testing of:

Soils Compaction Control
Walkway and Roadway Restoration
Testing of Bituminous Asphalt
Cast-in-Place Concrete
Leakage Tests of Complete Sewer System

The Contractor shall perform, or arrange for the performance, and pay all costs in connection therewith, for these and all other tests and inspections required by the Contract Documents except: soil compaction. Soil compaction test shall be paid under the bid item allowance.

100.30 REQUIREMENTS FOR INDEPENDENT TESTING CONSULTANTS.

A. Qualifications. Testing consultants shall comply with "Recommended Requirements for Independent Laboratory Qualifications", latest edition, published by the American Council of Independent Laboratories, and basic requirements of ASTM E329, "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction", latest edition.

The Contractor shall submit to the Engineer, for prior approval, the name and address of the proposed testing consultant with description of personnel, facilities, equipment and other qualification data, including:

1. Report of inspection of facilities made by Materials Reference Laboratory of the National Bureau of Standards during most recent tour of inspection, with memorandum of remedies of any deficiencies reported by the inspection.
2. Certificate of calibration of applicable testing equipment made by an accredited calibration agency within 12 months prior to submittal date.

B. Test Report. The testing consultant shall be instructed to submit directly to Engineer, 3 copies of all reports of tests or inspections made, showing compliance, irregularities or deficiencies, identifying project, date of test location in project, applicable specification section, applicable standard(s) for compliance, observations relating to compliance, name and signature of inspector.

100.31 CONTRACTOR RESPONSIBILITIES. The Contractor shall furnish above qualification data and expedite submittals when testing consultant is employed by him; provide access to the Work; furnish casual labor and facilities to accommodate inspections and tests by the testing consultant whether employed by the Authority or Contractor.

100.32 TEMPORARY FACILITIES AND CONTROLS. Contractor shall be responsible for providing or arranging with subcontractors for all temporary utilities, facilities and controls during the construction period.

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A. Water. Water is available at the project site for use by Contractor in reasonable quantities and charge. Contractor shall ensure adequacy for use for construction, drinking, sanitation and fire protection purposes, or otherwise provide an adequate supply for such use. Contractor shall make temporary connection and provide adequate facilities to distribute water as required in cooperation with the Authority.

B. Temporary Heat and Protection. Contractor shall provide and maintain temporary enclosures, weather barriers, heat and ventilation as necessary to properly protect and cure all portions of the Work, whether or not permanently incorporated into the project, at all times during the construction period. Do not use solid fuel burning space heaters, or use or leave unattended any equipment or apparatus which might create an unsafe condition.

C. Sanitary Facilities. Contractor shall provide and maintain, throughout contract duration, adequate temporary toilet facilities in a neat and sanitary condition for all employees and authorized visitors at the site. Facilities shall be placed at approved locations near the work as directed by the Engineer and in no case farther than 500' from the open trench work. The facilities shall be moved as required to maintain close proximity to the active work site.

E. Fences and Barricades. Provide and maintain temporary fences, barriers, lights, guardrails and barricades as indicated by the Contract Documents, or as necessary to regulate vehicular and pedestrian traffic, to secure the Work and adjacent property, and to protect persons and property. Obtain necessary approvals and permits and provide temporary expedients as necessary to accommodate controls.

100.33 MATERIAL AND EQUIPMENT

A. Products List. Within 30 days after date of Contract, the Contractor shall submit to the Engineer a complete list of all products which are proposed for installation. Tabulate list by, and complete for, each specifications section. Include with listing of each product the name and address of manufacturer, trade name, model or catalog designation, reference standard, manufacturer's performance and test data, and subcontractor, as applicable.

B. Reference Standards. Reference in the specifications to standard specifications or publications or technical societies or governmental agencies, such as ASTM, ANSI, AISC, ACI, AWS, Federal Specifications, R.I. Standard Specifications for Road and Bridge Construction, Commercial Standards and the like, shall refer to latest edition adopted and published at time of receiving bids. It shall be understood that all manufacturers, producers and their agents, of materials required shall have such reference standards available for reference and be fully familiar with their requirements as pertains to their product, material or equipment.

In case of conflict between reference standards and contract specifications, the specification shall govern. In case of conflict between reference standards and codes, the one having the more stringent requirements shall govern.

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In the case where no reference standard is indicated within the Specification, the applicable Section of the R.I. Standard Specifications for Road and Bridge Construction, latest addition, shall govern.

C. Manufacturer's Instruction. The Contractor shall obtain and distribute necessary copies of manufacturer's instruction, including two copies to the Engineer. If a conflict exists between the manufacturer's instructions and the Contract Documents, notify the Engineer in writing and obtain his instructions prior to proceeding.

D. Product Delivery, Storage and Handling. The Contractor shall deliver materials, products and equipment to the Project site in undamaged condition in manufacturer's original, unopened containers or packaging with identifying labels intact and legible. Deliveries shall be arranged in accordance with the Construction Schedule and in ample time to facilitate inspection prior to installation to avoid unnecessary delays in the construction process.

The Contractor shall store and handle products as prescribed by manufacturer or as specified in the specifications in a manner to protect from damage by moisture, weather, abuse or construction operations.

100.34 CONTRACT CLOSE-OUT.

A. General. Refer to **Paragraph 20** of this SECTION for responsibilities and procedures with respect to completion and final inspection of work.

B. Submittals. Submit with or prior to Application for Final Payment, Consent of Surety to Final Payment and remaining releases, waivers, guarantees and all project data required by the Contract Documents.

C. Post-Construction Inspection. Prior to the expiration of one year from Date of Substantial Project completion, the Engineer will make a visual inspection of the Project in company with the Authority to determine whether correction or work is required. Contractor attendance at this inspection, if requested by the Engineer, is required.

100.35 LAYOUT OF WORK. The Contractor shall check the grade of the sewer pipes using standard manual survey techniques at least twice a day. Preferably within one hour of the start of work each day and a second time following lunch break. If electronic laser equipment is used to control line and grade, the Contractor shall be responsible for setting the laser beam to grade and maintaining proper calibration of the equipment. All pipe laid to the wrong grade due to improper setting of the laser and or malfunctioning equipment shall be removed and re-laid to the proper grade by the Contractor at his own expense. The cost for all layout shall be included in the unit price bid for sewer lines and shall not be paid for separately.

END OF SECTION

DIVISION 02000

CONSTRUCTION REQUIREMENTS

CONSTRUCTION REQUIREMENTS

SECTION 02100	Specific Conditions
SECTION 02200	Excavation & Backfill
SECTION 02300	Pipe Lines and Appurtenant Construction
SECTION 02400	Paving and Miscellaneous Work
SECTION 02500	Close Fit Cured-In-Place Pipe (CIPP) Rehabilitation of Pressurized Non-Potable Piping
SECTION 02600	Phased Temporary Bypass Operations
SECTION 02700	Pipeline Cleaning
SECTION 02800	Television Inspection
SECTION 02900	Sediment and Erosion Control

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SECTION 02100 - SPECIFIC CONDITIONS

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210.00 SPECIFIC CONDITIONS.

210.01 Technical Specifications. Wherever in these Specifications the term "ASTM" occurs, it shall be understood to mean the Standard (or Tentative Standard) Specifications or Standard Method of Test of the American Society for Testing Materials, Serial Designation in effect at the date of receipt of bids for this contract. All material unless otherwise specified shall meet the requirements of the latest specifications of the American Society for testing Materials, and shall be subject to the approval of the Engineer.

Wherever in these Specifications the term "AASHTO" Specifications or R.I. STD. SPEC. occurs, it shall be understood to mean the edition of the Standard Specifications adopted by the American Association of State Highway and Traffic Officials or the State of Rhode Island in effect at the date of receipt of bids for this contract.

210.02 Datum of Levels. All of elevations shown on the Plans are referred to NAVD 88. Benchmarks are provided on construction drawings.

210.03 Sanitary Provision. Adequate sanitary conveniences for the use of employees on the work, secluded properly from public observation, shall be constructed and maintained by the Contractor in such a manner and at such places as may be approved by the Engineer. Their use shall be strictly enforced. Refer to **Paragraph 32** of the **General Requirements** for details.

The Contractor shall rigorously prohibit the committing of nuisances on and about the work or upon adjacent private property, and any employee found violating these provisions shall be discharged and not again employed.

210.04 Cooperation. The Contractor shall allow the Authority or its agent, and other contractors and public service corporations, or their agents, to enter upon the work for the purpose of inspecting ongoing work, constructing, maintaining, repairing, removing, altering, or replacing such pipes, sewers, conduits, manholes, wires, poles, or other structures as may be required or permitted at, or on, the work by the Engineer. The Contractor shall cooperate with all aforesaid parties and shall allow reasonable facilities for the prosecution of any other work of the City, or of public service corporations, to be done in connection with this work. Care shall be taken at all times to inconvenience abutters as little as possible.

210.05 Maintenance of Traffic. The Contractor shall conduct his work so as to interfere with traffic as little as possible, and shall safeguard all highways and traffic thereon. The construction equipment and materials shall be so placed as not to endanger the work or to obstruct traffic, except as permitted by the Engineer. Safe and reasonable means of ingress to and egress from abutting property, private ways and alleys shall be provided for the usual and ordinary traffic in and out of all such premises by the Contractor at his own expense and as directed by the Engineer.

The use of private property shall not be interfered with, except in so far as necessary, and as determined by the Engineer, provided that practical construction methods are

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being used and reasonable precautions against unnecessary interference are being taken.

Every reasonable effort shall be made to reduce to a minimum interference with and inconvenience to business concerns on account of the construction work.

Excavated material shall be trucked away and returned if the Engineer deems it necessary and practicable as a means for avoiding serious interference with and inconvenience to a business concern, traffic operations or private residences.

It is the intent of this Contract to maintain through traffic along local streets and state highways wherever possible. If, in certain instances, it is necessary that certain streets must be of necessity closed to through traffic, such closing must be worked out in advance with the Engineer. This is necessary to allow the Engineer ample time to consult with local departments having jurisdiction over or the need to travel through these roads. A minimum of two 10-foot travel lanes, one in each direction, shall be maintained on State highway at all times, with proper traffic control including barricades, drums, traffic cones, temporary lane markers, flashers, signing, etc. The number and location of barricades and other traffic control devices shall be as directed by the Engineer throughout construction.

During non-working hours, the Contractor will be required to maintain a minimum of two 10-foot travel lanes, one in each direction, with proper traffic control including barricades, drums, traffic cones, signing, etc. The number and location of barricades and other traffic control devices shall be as directed by the Engineer throughout construction.

The Contractor shall provide and maintain flashing barricades around all open trenches and parked equipment within all public rights-of-way and in areas where personal injury could result, or as required by the Engineer. In addition, the Contractor will furnish and maintain detour and warning signs to guide traffic around all streets blocked to through traffic. Detour signs will be placed at all intersections along the route of each detour and will be lighted at night.

The Contractor will be required to place additional warning signs indicating construction ahead, rough or soft trenches.

Traffic Cones shall conform to RI Std. 26.1.0. Traffic Barrels with Type A or Type C Lights shall conform to RI Std. 26.2.0. Construction Signs and Warning signs, and Flashing Arrow Boards shall conform to the size and type and color as specified by R.I. Department of Transportation Standards. Traffic Barricades shall conform to RI Std. 26.3.0 or 26.3.1.

Type A low intensity flashing warning lights and Type C steady-burn warning lights shall be maintained so as to be visible on a clear night from a distance of 3,000 feet.

Type C steady-burn lights are intended to be used to delineate the edge of the traveled way on detour curves, on lane changes, on lane closures, and on other similar conditions.

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The Contractor shall coordinate, as necessary, all traffic control with the Warwick Department of Public Works.

Payment for Providing Traffic Control Devices. The provision of traffic warning signs, traffic barrels with lights, and traffic barricades will be paid for in accordance with Items 22 through 24 in the Schedule of Prices.

Payment for Placing, Maintaining, Relocating & Removing Traffic Control Devices. Payment for placing, maintaining, relocating and subsequently removing traffic control devices will not be paid for separately, but is included in the lump sum price for Item 1; Site Preparation, in the Schedule of Prices.

210.06 Traffic Police. The Contractor shall furnish traffic police if and when required by the Chief of Police or the Engineer. Traffic police shall be assigned to the project by the Warwick Police Department as follows: If one to three officers are required on the site at the same time "**traffic control officers**" shall be assigned to the project. If four officers are required on the site at the same time an "**officer in charge**" shall be assigned in addition to the three "**traffic control officers**." If five or more officers are required, a **police cruiser** will be assigned to the project. The duty of traffic police shall be solely to direct traffic.

Payment for Traffic Police. Uniformed police officers shall be used as required by the City of Warwick, or as directed by the Engineer. Payment for Traffic Police shall be paid for by the Warwick Sewer Authority (WSA). The Warwick Police Department shall invoice the WSA directly without charge to the Contractor. The Engineer shall review all related police invoices for approval.

210.07 Erection of Shanties. Shanties or other structures for housing or storage of materials, or storage of materials, or of an office, shall be built only if permission in writing is given by the Engineer, and will then be permitted only at such places as the Engineer shall approve. The sanitary conditions on the grounds in or about such shanties or other structures must always be maintained in a manner satisfactory to the Engineer.

210.08 Payment for Site Preparation and Miscellaneous Work. The lump sum stated under Item No. 1 in the Schedule of Prices shall be full compensation for preparing and performing everything required under this contract except where payment is specifically provided under other items in the Schedule of Prices. The lump sum amount for Site Preparation Item No. 1 shall not exceed 5% of the total contract price for Items 2 through 28. The lump sum shall also include compensation for providing and doing everything in preparation for the work to be done under other items of the Contract, including fabrication and erecting of the project identification signs as required in this Contract; establishment of the necessary construction plant; construction access and roadways; maintenance of travel including placing, maintaining, and subsequently removing traffic control devices; for removing and disposing of existing structures, both above and below ground, as shown on the plans; for cleaning up the entire site of the work after construction; and for all other work regardless of its nature which is not included for payment in other items of the

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Schedule of Prices but which is, nevertheless, necessary for complete construction of the project set forth by this Contract. In addition to the various generalized items mentioned above, payment for the "Office for Authority" shall be included in the lump sum stated for Site Preparation.

210.09 Section Removed.

210.10 Section Removed.

210.11 National Grid Gas Company Conditions.

Contractor's Responsibility for Utility Property and Services. At points where the Contractor's operations are adjacent to properties of National Grid, and where damage at such point results in considerable expense, loss or inconvenience to the Gas Company, work on this Contract shall not commence until all arrangements necessary for the protection thereof have been made.

The Contractor shall cooperate with the Gas Company in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication of rearrangement work may be reduced to a minimum, and that services rendered by those parties will not be unnecessarily interrupted.

In the event of contact with, or damage to, any gas facilities or its protective coating, or the interruption to gas service as a result of being exposed or unsupported, the Contractor shall promptly notify National Grid and shall cooperate fully with that Company in the restoration of service.

Upon receipt of said notice, National Grid shall immediately dispatch personnel to the subject location to effect temporary or permanent repair of the damage. **Under no circumstance shall the excavator back-fill or conceal the damage area until National Grid arrives at the subject location. Upon the occurrence of the escape of gas from a broken line, the person or public agency responsible for the operations causing the damage shall evacuate the immediate area while awaiting the arrival of National Grid personnel.**

The location and depth of existing gas lines as shown on the Plans are approximate and should not be relied upon by the Contractor. The Contractor shall check and verify the location of all underground gas lines before proceeding to commence work or to order materials. Excavation shall be in accordance with all statutes, ordinances, rules and regulations of any city, state or Federal Agency that may be applicable. Any damage to the existing utilities as marked by Dig Safe or as shown on the Plans arising out of said excavation, or by reason thereof, shall be the Contractor's sole responsibility.

It is understood and agreed that the Contractor has considered all of the permanent and temporary utility appurtenances in their approximate or relocated positions as shown on the Plans. It is also understood that no additional compensation will be

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allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from said utility appurtenances or the operation of moving them.

Construction Methods. Backfilling around a gas main shall consist of suitable materials (gravel or padding sand) placed in layers of not more than 8 inches after compaction. Compaction shall be achieved by mechanical tampers, vibrators or rammers. Backfill under gas facilities shall be compacted to not less than 95% of maximum density. Unless otherwise directed, the backfill shall be brought to the surface of the surrounding ground and neatly graded.

Training. Prior to start of construction it is highly recommended that the Contractor's field personnel receive training on subjects relating to natural gas pipelines. This training will be provided by National Grid.

210.12 Project Identification Sign & Details. The Contractor shall provide, erect, and maintain in good condition one (1) project identification sign at a location on the project site designated by the Authority. The sign shall be erected within twenty-one (21) days after the construction Contract is awarded and, in any event, prior to the start of construction operations. The design and construction standards of the sign are presented on the pages following these Special Conditions. The cost of providing the sign shall not be paid for separately but shall be included in the lump sum price for Item No. 1, Site Preparation, in the Schedule of Prices.

210.13 Price Adjustment – Liquid Asphalt and Diesel Fuel. The intent of this provision is to insure adequate and fair compensation for unpredictable and fluctuating costs which, from time to time, occur in the prices of Liquid Asphalt and Diesel Fuel. The price adjustment provisions are made part of the Contract to assure more realistic bidding and encourage competition.

The base price is the unit price of the material (FOB Terminal), as determined by the WSA through the RIDOT, just prior to the project bid date.

The period price is the unit price of the material (FOB Terminal), as determined by the WSA through the RIDOT, for any one-month period following the bid date during which the price varies from the base price.

Price adjustment will be determined by the difference between the Period Price and the Base Price. Price adjustments will only be made at the end of each month during which; a) work was accomplished on the project; and b) prices increase by 15% or more. Price adjustments will not be allowed beyond the completion date of the Contract or an approved extension thereof.

Liquid Asphalt Cement. The asphalt content will be the optimum amount used in every ton of bituminous concrete mixture, as determined by the RIDOT Standard Specifications.

The Price Adjustment will be determined by multiplying the total weight of liquid asphalt, in tons, by the difference between the base price and period price.

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Diesel Fuel. The fuel for operating the plant, and for hauling and placing bituminous concrete, will equal the total number of tons of bituminous concrete placed during the month in question times a fuel adjustment factor of 2.5 gallons of fuel per ton of bituminous concrete. Tonnage of bituminous concrete placed during the month in question will equal the sum of the weights indicated on the Daily Automated Recordation printout slips provided at the plant.

The Price Adjustment will be determined by multiplying the total volume of fuel, in gallons, by the difference between the base price and the period price.

No price adjustment will be made for liquid asphalt or diesel fuel unless the amount of the adjustment exceeds \$500.00 and deviates more than 15% from the bid price for the month.

- 210.14 Tree Trimming.** This work consists of removing tree limbs if needed to facilitate the installation of sewer structures, pipe, CIPP liner, and/or temporary bypass operations specifically for work not included in other bid items. Prior to the start of construction, the Contractor shall identify to the Authority locations throughout the entire project which require trimming to facilitate construction operations. The Authority shall review the request and shall ultimately determine the extent of work to be performed.

Payment for Tree Trimming. The lump sum stated allowance under Item No. 25, in the Schedule of Prices shall be full compensation for all tree trimming approved by the Engineer. Tree trimming shall be performed by a firm approved by the Authority.

- 210.15 Miscellaneous Utility Work.** This work consists of any unanticipated utility conflicts with the proposed work that is not specifically included in other bid items. The Authority shall review the request and shall ultimately determine the extent of work to be performed.

Payment for Miscellaneous Utility Work. The lump sum stated allowance under Item No. 27, in the Schedule of Prices shall be full compensation for all unanticipated utility work that is required due to conflicts with the proposed sewer. The dollar value associated with the lump sum price listed under Item No. 27 shall be representative of the actual costs for the performing the work including profit and shall be balanced to ensure that sufficient funds are allocated for each portion of work and shall be subject to acceptance by the Engineer. The Contractor shall document and submit all costs associated with work directed by the Owner. Any damage to existing utilities that are not in conflict with the proposed sewer and are damaged by the contractor's operations will not be paid for under this item of work and will be repaired and/or replaced at the contractor's expense.

- 210.16 Full Trench Replacement of Force Main.** This work consists of any sections of force main found to be unsuitable for CIPP rehabilitation that require trenched removal and replacement with new 12" Polyvinyl Chloride (PVC) Force Main and Fittings as specified under **Section 230.04** 'Polyvinyl Chloride (PVC) Force Main Fittings' of these specifications. The Authority shall review the request and shall ultimately determine the extent of work to be performed.

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Payment for Full Trench Replacement of Force Main. The lump sum stated allowance under Item No. 28, in the Schedule of Prices shall be full compensation for all work required and incidental to the removal and disposal of existing force main, and the installation of new 12" Polyvinyl Chloride (PVC) Force Main as specified under **Section 230.06** 'Payment for Pressure Sewers' of these specifications.

END OF SECTION

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SECTION 02200 - EXCAVATION & BACKFILL

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220.00 EXCAVATION AND BACKFILL

220.01 Extent of Work. The Contractor shall perform all excavation, including compaction and backfill and construct all fills required for the construction of the new work, all as shown on the Plans. The work shall include the removal of materials by power or hand excavation; handling and re-handling of excavated material for backfilling trenches; construction and compaction of embankments or fills; hauling and disposal of any and all surplus excavated materials encountered regardless of nature; the placing of earth for backfilling or fill; repairing or reconstructing all paving disturbed by the construction work; all pumping, bailing and draining of water; and all sheeting, shoring and cofferdam work where required. Materials to be excavated shall be those encountered within the limits required to be excavated, including earth, boulders, ledge rock, various types and thicknesses of pavement, fill, trash, debris and other materials, whether or not such materials are indicated on the Plans.

220.02 Trenches and Other Excavation. The trenches and other excavations shall be of sufficient width and depth at all points to allow pipes to be laid, joints to be formed, and appurtenant construction to be built in the most thorough and workmanlike manner, and to allow for sheeting and shoring, pumping and draining, and for removing and replacing any material unsuitable for foundations. The trenches and excavations shall be at least 12 inches but not greater than 24 inches wider than the outside dimensions of the structures they are to contain; trenches must be not unnecessarily wide so as to materially increase the load on the pipe resulting from backfill, or to damage any unnecessary paving. The bottoms of trenches and other excavations shall be excavated to lines and shapes satisfactory to the Engineer. Bottoms of trenches shall be excavated to a depth of 6 inches below bottom of pipes, and to a depth of 6 inches below concrete encasement at pipe cradles and chimneys to allow for the placement of selected material. No tunneling will be permitted in place of open trench construction unless especially authorized by the Engineer. Excavations adjacent to existing underground pipelines and other underground structures shall be dug by hand to insure against possible damage to such pipelines and structures. Excavation just above the bottom of structures shall be dug by hand so that the foundations of structures shall rest on undisturbed earth.

- A.** Over Excavation. Wherever the bottom of the trench is rock or boulders, it shall be excavated to dimensions indicated on the Plans and refilled to grade with well-compacted selected material. Wherever boulders or ledge rock are encountered in excavating for structures, such boulders or ledge rock shall be removed to a depth of 6 inches below grade and the space occupied by them shall be refilled to grade with well-compacted selected material. Selected material shall be as specified in **Paragraph 220.14 of this SECTION.**

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As stated above, grade or normal depth of excavation is 6 inches below the bottom of all service connections, and 6 inches below all pressure main pipes. Excavation is 6 inches below precast or cast-in-place concrete masonry.

In streets having bituminous concrete pavement, paving shall be cut along both sides of trench by machine prior to excavation. Removal of the existing bituminous paving on local streets will not be paid for separately, but shall be considered as part of the trench excavation.

The trenches shall be opened at such times and to such extent only as permitted by the Engineer. Roadway pavement in City streets having bituminous concrete pavement shall be cut prior to trench excavation. Pavement will be cut a minimum of 12 inches wider than the top of the trench excavation. All street paving, sidewalks, crosswalks, curbs, sods, shrubs, trees, and any other surface material affected by the work shall be carefully taken up and kept separate from "other excavated materials" and later reset as directed by the Engineer. Unless otherwise required or permitted by the Engineer, the "other excavated material" in highways may be placed in the roadway, subject to conditions of the permits granted for the work and provided ample room is left for traffic and a clear space of not less than 2 feet is left between the material and the edge of the trench, or provided that interference with business or with use of private property does not require otherwise. Excavated material shall be kept neatly trimmed along the line of work. The total length of open trench shall be as short as is practicable. Excavated material, if suitable, shall be used for embankments or backfill at the direction of the Engineer. It is expected that in order to keep certain streets and driveways open to traffic, a part or all of the excavated material in these streets and driveways will have to be removed and stored during construction activities in these streets and re-handled for use as backfill. Additional requirements regarding maintenance of travel are explained in **Paragraph 210.05; Maintenance of Traffic**, of these Specifications.

Side slopes of excavation shall be less than the angle of repose of the material excavated and shall be flat enough to prevent slides or cave-ins. Any excavation required as a result of slides or cave-ins shall be performed by the Contractor at his own expense.

The final trimming excavation, which is to be performed by hand, shall not commence until the ground has been thoroughly dewatered and the Contractor is ready to install the pipe or to construct the foundations of the various structures.

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- B. **Payments for Trenches and Other Excavations** to normal depths for the various parts of the work will not be paid for separately, but is included in the unit prices of the sewer structure items in the Schedule of Prices. "Earth Excavation Below Grade," "Miscellaneous Earth Excavation" and "Rock Excavation" will be paid for under their respective items in the Schedule of Prices.

220.03 **Rock Excavation.** Rock excavation consists of all boulders and detached rock fragments exceeding one cubic yard in volume or solid ledge rock which, in the opinion of the Engineer, requires for its removal **drilling and blasting, or drilling and splitting mechanically, or split by hand.** Hardpan, or soft or disintegrated rock which can be removed without employing the above procedures, or previously blasted rock or broken boulders smaller than one cubic yard, or rocks outside the limits of excavation and which may fall into the trench, will not be measured nor allowed as rock excavation.

In the use, storing and handling of explosives, the Contractor shall strictly adhere to the requirements of **Paragraph 9; Blasting and Explosives**, of the **SPECIAL CONDITIONS** of these Specifications. In addition, blasting will not be allowed within 600 feet of any structure or dwelling.

- A. **Payment of Rock Excavation.** The quantity of rock excavation to be paid for under Item 2 in the Schedule of Prices is the number of cubic yards of ledge rock or boulders **drilled and blasted, drilled and mechanically split, or split by hand,** as measured before excavation, that would have been removed if the excavation had been made everywhere to a depth of 6 inches below the underside of low-pressure mains and 6 inches below the underside of the service connection piping or masonry and to a width of 27 inches greater than the outside dimensions of said pipe or masonry on each side.

The price stated under Item 2 is full compensation for furnishing all material, labor, equipment, explosives, tools, for the removal of rock from trenches including placement of the excavated rock in embankment, backfill or fills; or as spoil, hauled from the site, as directed by the Engineer. Removal of any existing concrete pavement will not be paid for as rock excavation.

220.04 **Miscellaneous Earth Excavation.** Wherever required by the Engineer, the Contractor shall perform earth excavation and backfilling in addition to the excavation and backfilling needed to construct the work as required by the Plans. Miscellaneous Earth Excavation and backfilling will be required by the Engineer for test pits to determine the location of existing utilities or for any other desired purpose. Test pits indicated on the plans shall be performed prior to the start of construction operations.

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- A. **Payment for Miscellaneous Earth Excavation.** The quantity of miscellaneous earth excavation and backfilling to be paid for under Item 3 in the Schedule of Prices is the number of cubic yards of material so excavated by order of the Engineer, as measured before excavation. The price stated for Item 3 is full compensation for furnishing all material, labor, tools, and construction equipment, and for all work and expenses incidental thereto, including the disposal of surplus materials in embankments, backfills, or fills, or as spoil, as directed by the Engineer.

220.05 Unauthorized Excavation. If the bottom of any excavation has been removed below the grade shown on the Plans or that prescribed by the Engineer, it shall be brought to grade at the Contractor's expense by refilling with well compacted selected material.

220.06 Earth Excavation Below Grade. Wherever, in the opinion of the Engineer, the material at or below grade line is unsuitable for foundations, it shall be excavated to such additional depths and widths as directed by the Engineer and shall be refilled with well compacted selected material. Grade line for all pipes and masonry is depth of 6 inches below the underside of pressure mains, 6 inches below the underside of the service connection piping or masonry and 6 inches below concrete encasement at chimneys and pipe cradles.

- A. **Payment for Earth Excavation Below Grade.** The quantity of earth excavation below grade to be paid under Item 4 in the Schedule of Prices is the number of cubic yards of material so excavated, as measured in place by the Engineer. The price stated is full compensation for furnishing all material, labor, tools and construction equipment, and for all work and expense incidental thereto, including the disposal of surplus materials in embankments, backfills or fills, or as spoil, as directed by the Engineer.

220.07 Earth Retaining Systems. The Contractor shall furnish, put in place and maintain trench boxes, temporary sheet piling, temporary sheet piling with ground anchors; and soldier piles and lagging, at the locations where pipe and structures are to be installed. All earth retaining systems shall conform to **Section 805** of the **Rhode Island Standard Specifications**. The Contractor shall conform to the following performance standards for the installation of pipe:

A. **Performance Standards.**

1. All earth retaining systems shall be designed by an engineer registered in the State of Rhode Island with the exception of OSHA approved Trench boxes. Trench boxes may be approved by an engineer registered in the state the trench box was designed or manufactured. Structural computations shall be provided for each retaining systems for the various depths of trench. Computations shall

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be submitted to the Engineer and the Authority for record, prior to the start of construction.

2. The Contractor shall conform to the latest rules and regulations of OSHA for all construction work.
3. Earth retaining systems shall be designed to prevent damage to adjacent pavements, utilities, properties, structures, and curbs; to prevent voids outside of the retaining system; to prevent settlement outside of the payment limits; and prevent any damage outside of the pay limits. Damage outside of the payment limits shall be repaired at the Contractors expense.
4. Retaining systems shall not be carried to a depth at manholes, such that it crosses the pipeline; it will bear upon the pipe. Special precautions shall be taken to guard against any damage or settlement to buildings, walls, utilities or other structures which are adjacent to the sewer.
5. Designs placing earth retaining systems below the pipe spring line are permissible, but their removal shall not alter and/or impact installed pipe.
6. The Contractor shall remove all earth retaining systems when the work is complete.

The Contractor shall be required to coordinate the relocation of overhead or underground utilities for the purpose of installing earth retaining systems. The Contractor shall coordinate his activities with all utility companies, the Engineer, and the Authority. Also, the Contractor, with the assistance of the Engineer and the Authority, shall be required to coordinate with local businesses and residences to plan utility service downtime. The Engineer and the Authority shall approve all utility relocation work.

The Contractor is advised that all costs related to temporary or permanent relocation of overhead utilities for the purpose of installing earth retaining systems shall be paid directly to the applicable utility by the Authority. This work shall be interpreted as the physical movement of the overhead facilities. The Engineer and the Authority shall approve all utility relocation work. The Contractor shall utilize alternate methods of earth support to minimize relocation. Prior to any construction, the Contractor shall submit a list of any overhead utilities requiring temporary or permanent relocation for approval by the Engineer and the Authority.

- B. Payment for Earth Retaining Systems.** No separate payment shall be made to the Contractor for Earth Retaining Systems. Payment for earth retaining systems shall be included in the various unit prices for the work items stated in the Schedule of Prices. Payment under these items shall include full compensation for furnishing all materials; installing, maintaining, and removing the retaining systems, all labor, tools and construction equipment, and for all work and expense incidental thereto.

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220.08 **Dewatering**. All excavations shall be kept dry at all times and all construction work shall be performed in the dry, unless otherwise authorized or directed by the Engineer. The Contractor shall remove by pumping, draining, bailing, well points, deep wells, or otherwise, any water which may accumulate or be found in the trenches and other excavations made under this Contract. The Contractor shall form all pump wells, sumps, dams, flumes, or other works necessary to keep the trenches and other excavations entirely clear of water while the sewers and other structures and their foundations are being constructed. Newly made masonry shall be protected from injury resulting from dewatering work by the use of canvas, tar paper, polyethylene film, or by such other sufficient pumping machines satisfactory to the Engineer. Pump wells shall be provided where needed to properly handle the ground water. The final trimming excavation shall not be performed until the Engineer is satisfied that the manner of dewatering the excavation meets with his approval.

The Contractor shall submit a design for the dewatering system prior to excavation on the project. The design shall include the intended method and calculations for the chosen method to be used.

The dewatering system shall be coordinated with the Contractor's earth support system. The design of the dewatering system and earth support system shall be prepared and stamped by a Professional Engineer licensed in the State of Rhode Island.

The Contractor shall utilize caution in the performance of the contract work to avoid loss of fines into the select material bedding, boiling of the bottom of the excavations, or other disturbances that will cause subsidence or loss of strength of the underlying natural soils, or any damage to existing structures, including work completed under this contract from movement. Sumps and wells shall be installed with the necessary select material and/or geo-textile to prevent migration of fines from the surrounding subgrade soils. If in the opinion of the Engineer, the procedures being utilized by the Contractor to dewater excavations are resulting in boiling, loss of fines or other detrimental effects, the Contractor shall modify his operation as necessary to assure that no damage will occur to existing facilities or the new work. Damage caused by the dewatering will be corrected at the Contractor's expense.

Any damages to existing facilities or new work resulting from the failure of the Contractor to maintain the work areas in a dry condition shall be repaired by the Contractor, as directed by the Engineer, at no additional expense to the Authority. Pumping shall be continuous where specified or directed or as necessary to protect the work and/or to maintain satisfactory progress.

The Contractor shall furnish, install and maintain all drainage systems and pumping equipment necessary to keep the ground water level at an elevation low enough so that no structures to be constructed under this Contract shall move or float on account of uplift hydrostatic pressure. Flotation of existing facilities and/or completed work shall be prevented by the Contractor by maintaining a positive and continuous operation of the dewatering system.

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The Contractor shall make and submit all necessary computations for the weights of the structures during the various stages of construction as may be necessary to satisfy this requirement.

The Contractor's pumping and dewatering operations shall be carried out in such a manner that no loss of ground will occur. All pipelines or structures not stable against uplift during construction or prior to completion shall be thoroughly braced or otherwise protected against movement or damage.

All water from the trenches and excavations, including water discharged from pumping systems and under drains, shall be removed and legally disposed of in such a manner as will not cause injury to the public health nor to public or private property, nor to the work complete or in progress, nor to the surface of the roadways/highways, nor cause any interference with the use of the same by the public.

Dewatering shall be accomplished by approved methods which have a background record of successful dewatering of similar excavations and subsurface conditions expected to be encountered in this work. All Department of Environmental Management standards and regulations concerning dewatering in wetland areas will be followed, where applicable.

The Contractor shall submit for approval his dewatering plan. This plan will include the method, design calculations, equipment, shop drawings showing siltation prevention devices and discharge points to be used in all areas of excavation. The dewatering system and design calculations shall be prepared and stamped by a Professional Engineer licensed in the State of Rhode Island. This Professional Engineer shall be experienced in the design of dewatering systems. It is highly recommended that the Contractor review the boring logs and samples provided.

Silt laden pump discharges will not be allowed to waste directly into the roadways or public drainage system, and any silting of the drainage system caused by pipe installation work shall be removed at once upon order of the Engineer.

Excavation in uncontrolled ground water shall not be allowed. Prior approval of the dewatering plan is required prior to excavation below the water table.

- A. Cofferdams.** Where cofferdams are necessary so that the work may be performed in the dry, the Contractor shall design, furnish, install, maintain and remove all such cofferdam facilities. Cofferdams shall be designed by a Structural Engineer registered in the State of Rhode Island to withstand all imposed loads and to prevent injury to persons or damage to existing structures and property and to the work.

Cofferdams shall be installed to sufficient depths to allow a reasonable depth of below grade excavation below the work to be constructed. They shall be as watertight as necessary for the construction of the work in the dry. They shall be of such dimensions as to give sufficient clearance for construction and

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inspection of the work, and to permit installation of all necessary dewatering facilities.

The Contractor shall be solely responsible for the design, construction, adequacy and safety of all cofferdam facilities and for any injury or damage caused by the installation or failure of the cofferdam facilities. Cofferdams, including all sheeting and bracing required, shall be removed by the Contractor after completion of the permanent construction unless otherwise directed by the Engineer.

- B. Diversion of the Water.** The Contractor shall be responsible for providing and maintaining all ditching, grading, sheeting, and bracing, pumping and appurtenant work for the temporary diverting of water courses and protection from flooding as necessary to permit the construction of work in the dry.

Upon completion of the contract work, the Contractor shall remove all temporary construction and shall do all necessary earthwork and grading to restore the areas disturbed to their original condition or to such other conditions as indicated or directed by the Engineer.

Water shall not be permitted to flow into or through excavations in which work is under way or has been partially completed. The Contractor shall not restrict or close off the natural flow of water in such a way that ponding or flooding will occur, and shall at all times prevent flooding of public and private property. All damages resulting from flooding or restriction of flows shall be the sole responsibility of the Contractor, at no additional expense to the Authority.

- C. Payment for Dewatering.** No separate payment shall be made for dewatering. Payment for dewatering shall be paid for under the various unit prices for the work items stated in the Schedule of Prices. Such payment shall constitute full and complete compensation for all dewatering by pumping, draining, bailing, well points, deep wells or otherwise and, control and diversion of all surface and subsurface water necessary to maintain all excavations and work areas in a dry condition for the construction of the contract work, complete and in a satisfactory manner. Such payment shall also constitute full compensation for furnishing, installing, maintaining, operating and removing all equipment, facilities, construction and appurtenant work required to maintain the areas in which construction of this Contract is to be conducted in a dry condition, and for all labor, equipment, materials, supplies, maintenance and all incidental costs and appurtenant work necessary to satisfactorily complete the work.
- D. Payment for the Dewatering Plan.** Payment for the design and preparation of the dewatering plan shall be included in the lump sum price for Item 1; Site Preparation, in the Schedule of Prices.

- 220.09 Protection and Repair of Existing Underground Structures.** Wherever culverts, sewers, drains, manholes, catch basins, catch basin connections, water mains, valve chambers, utility tunnel, gas pipes, electric and telephone conduits, house service connections, or any other underground constructions

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are encountered in excavating the trench, they shall be protected and firmly supported by the Contractor, at his own expense, until the trench is backfilled and the existing structures are made secure. Injury to any such structures caused by or resulting from the Contractor's operation shall be repaired at the Contractor's expense. The authority having charge of any particular underground structure shall be immediately notified of any damage to the structure and that authority shall order and supervise its repair. The Contractor may be ordered to make the repair or the authority having control of the damaged structure or utility may have his own contractor make the repair and back-charge the Contractor. Broken water services shall not be spliced but shall be replaced from the main to the curb stop.

220.10 **Reconstruction of Existing Underground Structures.** Unless otherwise indicated by the Plans, and if it shall become necessary in the opinion of the Engineer to move or reconstruct any water main, gas main, electric conduit, telephone conduit, any connections thereto, or any appurtenant structures, the work will be performed by the proper City Department or utility company owning same, and is not a part of this Contract. In case it shall become necessary, in the opinion of the Engineer, to reconstruct any underground structure encountered other than those above mentioned, the work shall be performed upon written order from the Engineer; and if such work is not covered by the prices bid, the Contractor will be paid for the work as provided under the General Conditions. Utility services are known to exist in all roadways and shall not be relocated for the convenience of excavation.

220.11 **Backfilling.** After the various pipelines and structures have been constructed, the space outside the walls of the structure and within the trenches, and other such areas shall be backfilled with select material to the limits shown on the Plans. Areas within the excavation that are beyond the limits of the select material shall be backfilled wherever possible with suitable material excavated for the construction of the various structures. Excessively wet material must be adequately dried and dewatered before being used as backfill. No backfilling will be allowed around the manholes or other masonry structures until the concrete or brick masonry has set sufficiently as determined by the Engineer. All material for backfilling shall be free of roots, stumps, frost, organic soils or other deleterious material. Materials used for backfilling trenches shall be free of stone greater than 9 inches in diameter.

References in this paragraph to "select material" shall be interpreted as "sand bedding" of the grade specified in **Paragraph 220.15** of these Specifications. The trench shall be backfilled by hand around each pipe to a height of one half of the pipe diameter with select material as the pipe is laid, unless concrete cradle backing is required for the pipe. Select material shall continue as backfill to a height of 6 inches above the pipe but may be placed by machine. Select material shall be placed evenly on both sides of the pipe and firmly compacted by suitable power tools or by other satisfactory methods. All the select material shall be covered with geo-textile filter fabric as specified in **Paragraph 230.18** of these Specifications. The remaining portion of the trench shall be backfilled with suitable excavated material and shall be compacted at the time of backfill as specified below.

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220.12 **Compaction.** Backfill shall be placed in lifts no greater than 18 inches, by suitable power tools, ramming, or otherwise, in equally effective manner as approved by the Engineer. On local streets trench backfill from the trench bottom to within three (3) feet of finish grade shall be compacted to 95% modified proctor and the remaining top three (3) feet of the trench backfill shall be compacted to 95% modified proctor. On all state highways and selected local high use roadways, the entire trench shall be compacted to 95% modified proctor. Maximum lifts shall be 18-inches.

Under all utility pads, wetwells and sewer manholes, compact the top 8-inches of sub-grade and layer of fill material to 95% modified proctor. Maximum lifts shall be 6-inches.

Backfill that is compacted by ramming, at least one rammer shall be provided to every three men backfilling. Power tampers shall exert a minimum blow of 250 foot-pounds per square foot of tamper face. Backfill around all structures appurtenant to the pipelines shall be placed and compacted as specified above for backfill around pipes. No stones weighing over 50 pounds shall be backfilled into the trench. Backfilling by mechanical equipment may be permitted if conditions warrant. Special precautions shall be taken against undue damage to existing surface materials by mechanical equipment. Unnecessary damage to such surface materials shall be repaired at the Contractor's expense. Unless otherwise specifically required, all paving, sidewalks, crosswalks, curbs and gutters damaged by the work shall be built anew and all loam sods, shrubs, trees, and other surface material shall be replaced in good condition. In private property and elsewhere, if replacement of sods does not produce a satisfactory turf, the area shall be loamed, rolled, seeded and wetted to produce satisfactory results. Damage to trees shall be repaired by an experienced forester.

All surplus or excess excavated materials of all types, including excavated pavement, not used for backfill or embankment shall be hauled from the site to an approved dry upland disposal area obtained by the Contractor.

The Engineer may direct the Contractor to backfill sewer pipe crossing under transite water mains with excavatable flowable concrete fill. If so directed, the excavatable flowable concrete fill will be paid under Item No. 18; Cast in Place Concrete, in the Schedule of Prices.

A. Pre-construction Requirement for Backfilling. Prior to construction operations, the Contractor shall submit a detailed outline of his method of compacting backfills for the following three areas.

1. Bottom of excavations to within three feet of finish grade
2. Top three feet of trench
3. Below all transverse utility/drain crossings.

The outline shall be submitted in writing prior to the Pre-construction Conference. The methods outlined shall be subject to review and approval of the Engineer.

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- B. **Payment for Backfilling** and for hauling and disposal of excess or surplus materials, regardless of their nature, is included in the prices of the various work items in the Schedule of Prices, and will not be paid for separately.

220.13 Gravel Borrow. It is expected that on some of the trenching and under paving work, gravel borrow will be required for replacing rock or other unsuitable material excavated from the project. The gravel shall be bankrun granular material or processed gravel consisting of clean gravel and coarse sand practically free from loam and conforming to the requirements of **Para. M.01.02 and M.01.09 Table I, Col. 1a or 1b of the R.I. Standard Specifications** as directed.

- A. **Payment for Additional Gravel Borrow.** The quantity of Additional Gravel Borrow to be paid for under Item No. 7 in the Schedule of Prices is the number of cubic yards of material ordered placed by the Engineer as measured in place after compaction. The price stated is full compensation for furnishing all gravel borrow required for fill, embankments, trenches, or elsewhere, for furnishing all labor, tools and construction equipment, and for all work and expense incidental thereto, including transportation of material from the borrow area, spreading, properly compacting and shaping of the material for fill or embankment. Gravel Borrow used as a subbase course for temporary and permanent pavement patch will not be paid for under Item No. 7, but is included for payment under the appropriate paving items.

220.14 Additional Selected Material. Selected material of satisfactory quality and size shall be furnished to replace unsuitable material excavated below grade, to bed the pipe in rock trench, to replace unauthorized excavation, for bedding under R-5 riprap, and elsewhere as shown by the Contract Drawings, or as directed by the Engineer. Selected material shall be commercial grade 3/4" crushed stone or "Filter Stone" as specified in Para. M.01.07 of the R.I. Standard Specifications for Road and Bridge Construction. All stone shall be suitably graded from the smallest to the largest particles; it shall be clean, hard, durable and free from dust, loam, clay or organic matter, it shall be washed or screened, or both, if required. All materials furnished under this clause shall be well compacted in place.

- A. **Payment for Additional Selected Material.** The quantity of Additional Selected Material to be paid for under Item No. 5 in the Schedule of Prices is the number of cubic yards of additional selected material required to fill authorized excavation below normal grade, for bedding under R-5 rip-rap and/or as otherwise ordered by the Engineer, measured in place. The price so stated is full compensation for furnishing all materials, labor, tools, and construction equipment, and for all work and expense incidental thereto.

Selected material used to bed pipe in earth and rock trenches excavated to normal depth is included for payment under other items

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in the Schedule of Prices and, therefore, will not be paid for separately.

Selected material required to fill unauthorized excavations will not be paid for separately, but will be provided at the Contractor's expense.

220.15 **Sand Bedding.** Sand material of satisfactory quality and size shall be furnished to construct the bedding for pressure sewer pipes. Sand shall conform to the requirements of AASHTO M 45 and the RI Standard Specifications for Road and Bridge Construction. All sand shall be clean, hard, and free from dust, loam, clay, or organic matter. All materials furnished under this clause shall be compacted in place to 95% modified proctor.

A. Payment for Sand Bedding. The quantity of sand bedding for bedding under and around installation of permanent pressure piping components shall be included under Item No. 13 in the Schedule of Prices. The price included shall be full compensation for furnishing all materials, labor, tools, and construction equipment, and for all work and expense incidental thereto.

Payment for Sand Bedding installed by the Contractor for temporary bypass pipe trenching operations **shall be included separately under Item No. 8** in the Lump Sum Price for Phased Temporary Bypass Pumping.

Sand shall not be used to replace unsuitable material excavated below grade, to replace unauthorized excavation, or to bed the pipe in rock trench below normal depth. Gravel Borrow or Additional Selected Material shall be utilized in accordance with **Paragraphs 220.13 and 220.14**, respectively, of this Section.

220.16 **Crushed Stone.** Crushed stone material of satisfactory quality and size shall be furnished to construct the bedding for concrete structures to the depths indicated on the Contract Drawings. Crushed stone shall conform to the requirements of AASHTO M 45 and the RI Standard Specifications for Road and Bridge Construction. All crushed stone shall be clean, washed, hard, and free from dust, loam, clay, or organic matter. All materials furnished under this clause shall be compacted in place to 95% modified proctor.

A. Payment for Crushed Stone. Crushed stone shall be paid for under the various Bid Items in the Schedule of Prices, for bedding under concrete structures and/or as otherwise required. The price so stated is full compensation for furnishing all materials, labor, tools, and construction equipment, and for all work and expense incidental thereto.

220.17 **Compaction Testing.** Field density tests shall be taken at the depths and intervals specified herein to ensure compaction requirements are attained. Testing shall conform to ASTM D2922 and ASTM D3017, nuclear methods. Test locations shall be established at horizontal intervals that in the opinion of

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the Engineer represent the overall condition of the backfilled trenches. As conditions warrant, the Engineer may reduce or increase the interval as he feels necessary to properly monitor the backfilling/compaction operation. Two tests shall be taken at each test location. One test shall be taken at 5 feet above the pipe invert and a second test shall be taken at 2 feet below existing grade. The Engineer shall keep a log of all test results. If backfill is compacted by jetting or puddling the Contractor shall excavate pits at the test locations to the test levels as stated above for compaction testing. After testing, the pits shall be backfilled and compacted.

Soil compaction testing and field density test shall be performed by a testing firm determined by the Authority. Payment shall be made under the allowance for Item 21 Soil Compaction Testing. The contractor shall reimburse the testing firm chosen by the Authority. The contractor shall receive reimbursement by submitting invoices with the Monthly Progress Payment.

If tests show compaction requirements are not met, the Contractor shall continue his compaction effort until satisfactory results are attained. The cost to retest compaction due to nonconformance will not be reimbursed to the Contractor.

Continued nonconformance will result in the shutdown of excavation until the Contractor submits and receives approval of backfill methods to prevent nonconformance with backfill compaction requirements.

220.18 Guidelines for Backfill and Compaction Around Gas Pipes
Reference attached sheet from National Grid

END OF SECTION

GUIDELINES FOR BACKFILL AND COMPACTION AROUND GAS PIPES

PERMANENT BACKFILL AND COMPACTION

DESCRIPTION

This work shall consist of backfilling and compacting all disturbed material at and around existing gas pipes and facilities. Size of pipe, material, length of exposed pipe, location of pipe, etc. will all follow the same set of Standards and Specifications stipulated by National Grid. If design plans call for gas pipes to be exposed and supported (sheeting methods not used), then at the time of backfill, all disturbed material below the invert of the gas pipe shall be removed and replaced with suitable roadway or trench excavation material or bedding material. The contractor will not be allowed to replace this disturbed material with the same existing material if it has now been mixed with adjacent silty subsoil (clays) and fines. Well-graded gravel and sands will be used to replace the unsuitable material when no excess suitable material is available on site. Soils with high humus or mineral content should not be used to for backfill because they can promote electrolytic or bacterial attack.

Backfilling the gas pipe should begin immediately after the work in that location is complete. The region within 6" alongside and on top of the gas pipe shall be backfilled with padding sand (free of cinders, ash, and rock). In no case shall the material used for backfilling in this region contain any stones. Backfill shall consist of suitable materials (medium to coarse sands with little or no silts) placed in layers of not more than 8" to 12" after compaction.

Trench spoil material shall be suitable for backfilling above the padding material as long as rocks with a diameter larger than 3" are removed. The layers shall be mechanically compacted to the industry standard of 95% or until a density comparable to the unexcavated material is achieved. In some instances, flooding with water is an acceptable method of compaction but only if the back-fill material is clean, coarse, and adequate drainage is existent. The above specified backfill material is essential in order to attain the degree of compaction necessary to avoid future settlement.

Tracing Wire, if necessary, shall be installed 2" to 6" below Plastic gas pipes.

Warning Tape shall be installed approximately 12" above the gas pipe.

A minimum of 2" temporary pavement shall be applied over the trench as soon as possible.

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SECTION 02300 – PIPE LINES AND APPURTENANT CONSTRUCTION

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02300 PIPE LINES AND APPURTENANT CONSTRUCTION.

230.01 Extent of Work.

- A. The Contractor shall furnish all pipe, fittings and other materials and shall perform all work and furnish all equipment necessary for the construction of Ductile Iron and PVC force main sections, and all appurtenant construction therefore, including manhole connections, as indicated on the Contract Drawings and as specified herein.

230.02 Reference Standards.

- A. References herein are made in accordance with the listed specific standards of the following organizations and work under this Section shall conform to the latest edition, unless modified by these Specifications.
1. American National Standards Institute (ANSI).
 2. ASTM International (ASTM).
 3. American Water Works Association (AWWA).
 4. Ductile Iron Pipe Research Association (DIPRA).
 5. Hydraulic Institute (HI).

230.03 Ductile Iron Force Main and Fittings

- A. **Kind of Pipe.** The kinds of pipe which shall be used for the various parts of the work are as follows: 12" Ductile Iron Push-on Joint Pressure Class 350, ANSI/AWWA C150/A21.50, inside epoxy coating per manufacturer standard.
- B. **Quality Assurance.**
1. Work under this Section shall comply with the federal, state, and local requirements for the design, installation, testing, and certification of an operational sanitary utility sewerage force main system.
 2. Work shall comply with New England Interstate Water Pollution Control Committee (NEIWPCC) TR-16.
- C. **Submittals.**
1. Shop Drawings: Submit shop drawings of the following items:
 - a. Pressure sewer pipes and fittings.
 - b. Thrust restraints.
 - c. Sleeve couplings and connections.
 - d. Valves.
 2. As-Built Drawings:
 - a. As-Built Drawings shall indicate the true measurements and locations, horizontal and vertical, of the new force main system construction. As-Built Drawings shall include a minimum of three (3) ties to each manhole from fixed

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permanent objects. As-Built Drawings shall be stamped with the seal of a licensed land surveyor and licensed professional engineer.

- b. Submit four (4) sets of 24-inch by 36-inch drawings and a digital copy in a CD format to the Engineer prior to obtaining substantial completion certificate.

D. Delivery, Storage, and Handling.

1. Care shall be taken in loading, transporting and unloading to the structures, pipe, valves, fittings, pumps and other materials furnished under this section. All materials shall be examined by the Engineer before installation. Defective materials determined by the Engineer to be unrepairable shall be replaced at no cost to the Owner
2. Store materials on the job site in accordance with manufacturer's recommendations.

E. Laying Pipe.

1. Lay ductile iron pipe and fittings in accordance with the requirements of ANSI/AWWA C600-05 with a bury depth as shown on the Contract Drawings. When crossing or laying near existing utilities maintain a minimum depth of 18-inches below water mains and a horizontal distance of 10-feet. Pass under other utilities and avoid the creation of high points that may trap gasses that will require the installation of an air release valve/chamber. The Contractor shall make these determinations in advance of the crossings, and provide and install appropriate fittings and short lengths of pipe as necessary.
2. Pipe cutting shall be done by machine, leaving a smooth cut at right angles to the axis of the pipe, taking care to minimize damage to the cement lining.
3. The cut end of the pipe which is being made up into a push-on joint shall have cut end beveled to prevent damage to the gasket during assembly of the joint.
4. All bends, tees, caps, plugs shall be provided with reaction or thrust blocking as shown on the Contract Drawings, in addition to retainer glands.
5. Precast concrete thrust blocks shall generally be solid concrete block, with a minimum size of 8-inch by 8-inch by 16-inch and they shall be set upon the original trench bottom or on compacted backfill extending to the undisturbed trench wall.

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6. When pipe laying is not in progress the open end of the pipe(s) shall be closed by a suitable pipe cap or plug to prevent entry of dirt stones or groundwater.

F. Fittings.

Conformance: ANSI/AWWA C150/A21.50-02 or latest revision thereto.

Joints: Rubber gasketed joints shall meet the requirements of ANSI/AWWA C111/A21.11-00 or latest revisions thereto.

Ductile Iron Sewer Force Main Pipe and Fittings shall be double cement lined with an asphaltic serral coat meeting the requirements of ANSI/AWWA C104/A21.4-03 or latest revision thereto. Pipe exterior shall be coated with an approved asphaltic coating approximately 1-mil in thickness. Sizes and dimensions shall be as shown in the table below:

<u>Nominal Size</u>	<u>Average O.D.</u>	<u>Minimum Wall Thickness</u>
12"	13.20"	0.28

G. Sleeve Couplings.

1. Thoroughly clean pipe ends for a distance of 8 inches from the ends prior to installing couplings, and use soapy water as a gasket lubricant.
2. Slip a follower ring and gasket (in that order) over each pipe and place the middle ring centered over the joint.
3. Insert the other pipe length into the middle ring the proper distance.
4. Press the gaskets and followers evenly and firmly into the middle ring flares.
5. Insert the bolts, finger tighten and progressively tighten diametrically opposite nuts uniformly around the adapter with a torque wrench applying the torque recommended by the manufacturer.
6. Insert and tighten the tapered threaded lock pins.
7. Insert the nuts and bolts for the flange, finger tighten and progressively tighten diametrically opposite bolts uniformly around the flange applying the torque recommended by the manufacturer.

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H. Plug Valves, Check Valves, And Air Release Valves.

1. Install valves and accessories as detailed on the contract drawings and in accordance with manufacturer's instructions and recommendations.
2. Carefully erect all valves and support them in their respective positions free from distortion and strain.
3. Independently support all valves connected to pumps and equipment, and in piping systems that cannot support valves.
4. Repair any scratches, marks and other types of surface damage with original coating supplied from the factory.
5. Install valves such that 'open' and 'close' position indicators are easily visible.
6. All valves and actuators shall be installed in a manner that will provide for proper clearances and ease of operation. In addition, valve operators must be capable of being rotated on 90-degree increments to facilitate field installation.
7. Test in accordance with AWWA C500 latest edition.

I. Flanged Ductile Iron Pipe.

1. All joints are to be made water-tight in accordance with the requirements specified herein. Flanged joints shall be used inside structures.
2. Pipe shall be jointed in strict accordance with the pipe manufacturer's instructions.
 - a. The pipe and fittings shall have identical face to face and center to face dimensions, and the same flange drilling as ANSI B16.1 fittings.
 - b. The bolts shall be corrosion resistant and suitable for the design pressure of the piping system. The joints shall be made with full face gaskets.
3. The pipe and fittings shall be factory made. The piping assemblies shall be secured with suitable restraints and supports to remain in place at design pressure and with the starting and stopping of pumps and equipment.

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J. Connections to Precast Concrete Structures.

1. Final constructed condition of all precast units including joints, seals, openings, etc. must be watertight to meet testing standards specified herein.
2. Pipe connections shall be flexible sleeve or rubber gaskets ('Lock Joint', 'Kor-n-Seal', 'A-Lok', '8QRS-PSX' or approved equal). Annulus between flexible connection and concrete shall not be grouted.

230.04 Polyvinyl Chloride (PVC) Force Main and Fittings

A. Kind of Pipe.

Conformance: AWWA C900, latest edition, SDR-21 Class 200

PVC Pressure Sewer Pipe and Fittings shall conform to ASTM D2241 for standard dimension ratios and be composed of clean, virgin Class 12454 compounds in accordance with ASTM Specification D1784 latest edition. All pipe and fittings shall be bell and spigot with gasketed joints conforming to ASTM F477 and tested to ASTM D3139 Standard. Standard lengths shall be 20 feet plus or minus 1 inch. Sizes and dimensions shall be as shown below:

<u>Nominal Size</u>	<u>Average O.D.</u>	<u>Minimum Wall Thickness</u>
12"	12.75"	0.606"

B. Quality Assurance.

Examine the pipe and fittings for cracks, dents, abrasions or other flaws prior to installation. Mark rejected piping with a yellow crayon and remove from the project within 24 hours.

1. Cutting the Pipe
 - a. Cut the pipe square with saws or pipe cutters designed specifically for the material. Protect the pipe and fittings from serrated holding devices and abrasion.
 - b. Bevel the end in accordance with the manufacturer's recommendations. Locate a depth mark with a pencil or crayon to assure the spigot end is inserted to the recommended depth.
 - c. Remove burrs and wipe off all dust and dirt from the jointing surfaces

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Perform all jointing operations in accordance with manufacturer's printed instructions. Make copies of manufacturer's printed instructions available to the Authority.

Pipe Warning/Tracking Tape shall be plastic 4-inch-wide tape with magnetic tracking wire labeled "Sewer."

2. Mark pipe and fittings 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
Applicable standard designation number

C. Submittals.

1. Shop Drawings: Shop Drawing showing lengths of pipe, fitting and joint details, construction details, tolerances and other information, as required.
2. Conformance Certificates: Each shipment of pipe and fittings shall be accompanied with the pipe manufacturer's notarized certification that materials meet specification requirements.
3. Guarantee: The Contractor shall furnish to the Authority 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. The form of guarantee shall in all respects be satisfactory to the Authority.

D. Delivery, Storage and Handling.

1. Avoid damage to pipe from impact, bending, compression or abrasion during handling and storage.
2. 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.
3. Ship rubber gaskets in cartons and store in a clean area away from grease, oil, ozone producing electric motors, heat and direct rays of the sun.

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4. Use only nylon protected sling to handle pipe. The use of hooks or bare cables will not be permitted.

E. Laying Pipe.

Pipe shall be laid upon a trench bottom prepared as hereinbefore specified in **Section 2200** of these Specifications. All pipes shall be carefully cleaned just before laying. Extreme care shall be exercised so as not to damage the pipe in handling. Each pipe shall be laid to line and grade and so as to form a tight joint with the next adjoining pipe and to bring the inverts continuous.

Concrete cradle shall be provided for the pipe in accordance with **Paragraph 230.05** of this Section as required by the Engineer.

Pipes not cradled in concrete shall be bedded in selected material as hereinbefore specified in **Section 2200** and as detailed on the Plans.

Pipe shall be laid in accordance with these Specifications and in accordance with the recommendations of the manufacturer of the pipe.

Except as may be necessary in making joints, in placing cradles, and in tamping the backfill material, walking on or working over the pipes after they are laid will not be permitted until the pipes are covered with earth to a depth of 12-inches above the top of the pipe. During construction all openings to the pipelines shall be protected from the entrance of earth, water or other material. Open ends of branches and pipes when completed shall be sealed with stoppers or by equally effective methods. The ends of service connections shall be marked with vertical hardwood stakes, as detailed on the Plans.

F. Flexible Couplings and Adapters.

Flexible couplings and adapters designed to take care of normal expansion and contraction movements of all pipes and to join different kinds of pipes, where shown on the Contract Drawings, shall be furnished and installed. The body and gasket retaining rings of the flexible couplings or adapters shall be cast iron. Gaskets shall be oil resistant and the bolts shall be of high corrosion resistant alloys suitable for underground burial.

Payment for flexible couplings, adapters, and increasers will not be made separately, but is included in the unit prices of the various pipeline items in the Schedule of Prices.

230.05 Concrete Cradle for Pipe. Concrete cradle, as detailed on the Plans, shall be used to bolster and strengthen the pipe wherever required by the Engineer. Concrete for cradle shall be Class A.

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230.06 Payment for Pressure Sewers. The quantities to be paid for pressure sewer pipes and fittings are the lengths in feet of various pipe sizes and trench depths measured along the centerline of the pipes as laid. No deductions will be made for the length of manholes in the pressure main. The prices stated in the aforesaid items are full compensation for furnishing all pipes, fittings, plugs, thrust blocks, survey layout, 4" wide plastic warning tape, and other materials required for building the pipelines; excavating to a depth of 6 inches below all pipes, for cutting of bituminous or concrete pavements as required, for furnishing and placing of bedding material from 6 inches below to 6 inches above the pipes for the full trench width, for backfilling with suitable excavated material from 6 inches above the pipe to 14 inches below existing pavement grade, as detailed on the Plans, and for laying, setting and jointing all pipes and fittings and for making all connections to existing pipes and manholes, including adapters for all leakage testing, concrete cradle and pipe anchorages, any required dewatering operations, for disposal of ALL excess excavated materials regardless of its nature as directed by the Engineer, for furnishing, placing, and removing all earth retaining systems, temporary timber sheeting and bracing, trench boxes and/or steel plates; for providing temporary bracing at existing utility poles, for removing and resetting existing mailboxes; for removing abandoned water and gas main pipe, all labor, tools and construction equipment; and for all other work and expenses incidental thereto, except highway paving and such other items as are included for separate payment in the Schedule of Prices. Any temporary shoring and bracing of existing structures and the repair of any damage which may be done to such structures or pipes is included in the prices stated in the items listed in this paragraph.

Payment for pressure sewer pipes and fittings installed by the contractor during construction of this project shall be included under Item No. 13 in the price per each for Sewer Manhole Structures.

230.07 Sewer Manhole Structures. Sewer manholes, all diameters, shall be constructed as indicated on the Plans of precast concrete manhole sections. Precast concrete sewer manhole sections shall be constructed of reinforced concrete conforming to the latest ASTM designation C478, or as shown on the Plans. Manhole steps shall be steel encased in a copolymer polypropylene plastic as specified elsewhere herein. Extra care shall be exercised in placing butyl resin preformed joint seal. Manhole joints and lifting holes shall be sealed inside and out with waterproof non-shrink grout to assure water tightness. Manhole inverts and shelves shall be constructed of hard burnt clay brick as hereinafter specified. Manhole base sections shall be provided with KOR-N-SEAL EPDM rubber boot with stainless steel band and clamp, or approved equal. Exterior surface of all sewer manholes shall be waterproofed with an asphaltic waterproof coating. A maximum of 5-inches will be allowed under frames. The frames shall be adjusted utilizing Infra-Riser Rubber Composite Adjustment Riser. Further adjustment will be performed with brick one-layer maximum.

A. Joint Sealant. All joints between precast concrete riser sections shall be sealed with flexible preformed butyl resin sealant. The sealant shall be carefully placed around the entire circumference of the joint to form a complete watertight seal. If in the opinion of the Engineer the seal is deficient, the riser section shall be

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removed and reset. Sealant shall be Kent Seal or Con Seal conforming to Federal Spec SS-S-210A or AASHTO -1988. All lifting holes shall be filled with non-shrinking grout.

- B. Cast Iron Manhole Frames and Covers.** Locking type frames and covers shall be 30-inch diameter and conform to the requirements of AASHTO Designation, M105, Class 30, latest revision and as manufactured by East Jordan Iron Works; Catalogue No. NPR10-2774A or approved equal. All covers shall be 30 inches in diameter and shall be non-rocking diamond-check pattern with the word "SEWER" cast thereon (extended "W"). One (1) $\frac{3}{4}$ " vent hole shall be required on each cover as detailed on the plans. Castings shall be taut, gray cast iron and shall be true to pattern, out of wind and free from flaws. The bearing surfaces of frames and covers against each other shall be machined to give continuous contact throughout their entire perimeter. All iron castings shall be thoroughly cleaned and fins removed before being delivered. All frames within all state roadways shall have a minimum depth of 8-inches and be heavy duty. Frames on local streets shall have a minimum depth of 6-inches and be heavy duty.
- C. Manhole Steps.** Manhole steps shall be of the size and shape shown on the Plans. Steps in precast concrete manholes shall be 1/2" diameter, grade 60 steel encased in copolymer polypropylene plastic jacket as detailed on the Plans and as approved by the Engineer. Manhole steps shall be "PS2 PFSL" as manufactured by M.A. Industries Inc. or an approved equal.
- D. Payment for Sewer Manhole Structures.** The quantity to be paid under Item No. 13 in the Schedule of Prices is the number of Sewer Manhole Structures per vertical linear foot with cleanout apparatus or sewage air release valves as indicated on the Plans and as specified herein. The price stated is full compensation for furnishing and installing precast manhole sections, all excavation, stone bedding, backfill, labor, tools, construction equipment and materials, manhole base, risers and flat top slabs, brick masonry and mortar, preformed joint sealant, filling lifting holes and manhole joints inside and outside with waterproof non-shrink grout, exterior asphaltic waterproofing, manhole frames and covers, and for installation of all pressure sewer piping, fittings and appurtenances as specified in **Sections 230.03** through **230.06** of these specifications, and for all other work and expenses incidental thereto, complete and accepted by the Engineer.

230.08 Brick Masonry for Manholes and Other Structures. The brick for ordinary brickwork shall be common hard burnt clay brick. All brick shall be regular and uniform in shape and size, with plans, parallel beds and faces.

Clay brick shall conform to Standard Specifications for Sewer Brick (made from clay or shale). ASTM Designation C32. Brick for manhole inverts and shelves shall be Grade SA, and for other parts of the work Grade MA.

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Grade SA clay brick for manhole inverts shall be hard burnt clay brick of especially dense texture, and shall not absorb more than 6 percent of their dry weight when boiled for five hours in water.

Tests of brick for conformance with Specifications shall be made at the Contractor's expense, and certified reports thereof shall be furnished to the Engineer. Samples for testing shall be selected by the Engineer and furnished by the Contractor.

In brickwork, each brick shall be dampened prior to its use; it shall be completely bedded in mortar at its bottom, sides and ends at one operation, care being taken to fill every joint. Brickwork shall be well bonded and joints shall be as close as practicable and shall not exceed 3/8". No brick masonry shall be laid in water nor shall any water be allowed to rise on or around any brick masonry until it has set at least 24 hours. No masonry shall be laid in freezing weather except as permitted by the Engineer and under conditions prescribed by him.

Brick masonry shall be laid in Portland cement mortar composed of one part Portland cement and two parts sand, measured by volume, to which not more than 10 pounds of lime shall be added for each bag of cement.

The sand for mortar for brick masonry shall be clean and sharp, and contain no grains larger than will pass a 1/8-inch mesh screen. Sand shall be of such size that not more than 10 percent of the total dry weight will pass a sieve of 100 meshes to the linear inch, and no more than 35 percent of the total dry weight will pass a sieve of 50 meshes to the linear inch.

- A. **Payment for Brick Masonry.** Payment for brick masonry for the various manholes and other underground structures is included in the unit prices for those particular parts of the work, and will not be paid for separately.

230.09 Cleaning Pipe Lines and Appurtenances. Upon completion of construction, all dirt and other foreign material shall be removed from the pipelines and their appurtenant constructions. No materials shall be left to impede the normal flow through them. Payment for cleaning and flushing will not be paid for separately, but shall be included in the prices for the pipe lines in the Schedule of Prices.

230.10 Filter Fabric for Bedding. The Contractor shall provide Mirafi Geotextile Nonwoven Filter Fabric #14ON, or approved equal. Filter fabric shall be placed completely over all bedding material for low-pressure sewer mains, all in accordance with the manufacturer's recommendations and as directed by the Engineer. Payment for filter fabric will not be made separately, but is included with the unit prices for the pipe lines in the Schedule of Prices.

230.11 Testing Pressure Sewer Pipe.

- A. Except as otherwise directed, pressure sewers (force mains) shall be given combined pressure and leakage tests in sections of approved length. The

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Contractor shall furnish and install suitable temporary testing plugs or caps; necessary pressure pumps, pipe connections, meters, gauges, gates, and other necessary equipment; and required labor. The Owner and Engineer shall have the option of using their own gauges.

- B.** Subject to approval and provided that the tests are made within a reasonable time considering the progress of the project as a whole, and the need to put the section into service, the Contractor may make the tests when he desires. However, pipelines in excavation or embedded in concrete shall be tested after the backfilling of the excavation or curing of the concrete and exposed piping shall be tested prior to field painting.
- C.** The section of pipe to be tested shall be filled with water of approved quality, and air shall be expelled from the pipe. If blowoffs are not available at high points for releasing air, the Contractor shall make the necessary excavations and do the necessary backfilling and make the necessary taps at such points and shall plug said holes after completion of the test.
- D.** The section under test shall be maintained full of water for a period of 24 hours prior to the combined pressure and leakage test being applied.
- E.** The pressure and leakage test shall consist of first raising the water pressure (based on the elevation of the lowest point of the section under test corrected to the gage location) to the pressure rating of the pipe or alternately, to two times the maximum calculated operating pressure of the pipe, as approved by the Engineer. If the Contractor cannot achieve the specified pressure and maintain it for a period of one hour, the section shall be considered as having failed to pass the test.
- F.** Following or during the pressure test, the Contractor shall make a leakage test by metering the flow of water into the pipe while maintaining in the section being tested a pressure equal to the pressure rating of the pipe. If the average leakage during the two-hour period exceeds a rate of leakage indicated in AWWA Section C600 per 24 hours per mile of pipeline, the section shall be considered as having failed the leakage test.
- G.** If the section fails to pass the pressure and leakage test, the Contractor shall do everything necessary to locate, uncover, and repair or replace the defective pipe, fitting, or joint, all at his own expense and without extension of time for completion of the work. Additional tests and repairs shall be made until the section passes the specified test.
- H.** If, in the judgment of the Engineer, it is impracticable to follow the foregoing procedure exactly for any reason, modifications in the procedure shall be made as approved, but in any event the Contractor shall be responsible for the ultimate tightness of the line within the above leakage and pressure requirements. Passing the test does not absolve the Contractor from his responsibility if leaks develop later within the period of warranty.

SHEET REMOVED.

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SECTION 02400 - PAVING AND MISCELLANEOUS WORK

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240.00 PAVING AND MISCELLANEOUS WORK.

240.01 Extent of Work. This work includes the removal and disposal of existing pavement over trench and structure locations; the placement of new roadway pavement, both temporary and permanent; sidewalk and driveway pavement; the removal and replacement of curbing of all types and the spreading of calcium chloride for dust control, all as indicated on the Contract Drawings and as directed by the Engineer.

240.02 General Requirements for Paving Work. Where pipe lines and service connections are constructed, a bituminous pavement patch shall be placed over a well-compacted trench in all streets. After the trench is fully consolidated, and settlement of earth backfill is complete, but not before 90 days after installation of the main pipelines or services in any particular street, the street shall be prepared for a permanent pavement overlay. The roadway shall be swept clean with a motorized sweeper; frames and covers adjusted to grade; a tack coat applied; and the new pavement overlay installed. All bituminous pavements shall be applied with a self-propelled motorized spreader.

The Contractor shall conform to the City of Warwick Ordinance Amendment No. 0-3.0.1 dated February 24, 2003, of Section I, Chapter 56, Sec. 56-16.

“On all construction projects which require excavation in the roadway of any street in the City, the Contractor performing the work shall apply pavement to the roadway within three (3) days of backfilling and closing the excavated portion of the roadway. Failure to apply pavement within the three-day period shall subject the Contractor to a penalty of \$500.00 per day for each day of the violation. Relief from the requirement to apply paving may be granted by the Director of Public Works and the Warwick Sewer Authority for weather conditions or other circumstances, which, in his or her discretion, would warrant the relief being granted.”

A. Materials. Paving materials and construction methods shall be in strict conformity with the latest revision of "Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction." Specifically, gravel borrow shall conform to the requirements of Para. M.01.02 and M.01.09, Table I, Col. I of the Standard Specifications. Bituminous concrete pavement shall conform to the requirements as specified for Surface Course Class 9.5 HMA, Surface Course Class 12.5 HMA, or Base Course material as designated under Para. M.03.01 of the Standard Specifications. Bituminous concrete pavements shall be placed, compacted and finished according to the applicable requirements of Para. 401.03 of the Standard Specifications. Bituminous Berm, where and if required, shall be placed and finished according to the applicable requirements of Section 905 - Curbing for Roadways of the Standard Specifications. All excess material from trench work shall be hauled from the site to an approved dry upland disposal area obtained by the Contractor.

Pipe trenches, after backfilling, shall be compacted as specified in **Section 02200** of these Specifications.

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The driveway surface course and street overlay surface course shall be placed at the same time.

Cut edges of bituminous concrete paving shall be coated with asphalt emulsion prior to placing of new paving against the cut edge. This requirement applies to roadways, bituminous sidewalks, and driveway construction.

Where road surfaces are to be overlaid curb line to curb line, or gutter line to gutter line, any necessary adjustment to existing drainage, sewer, or utility structures shall be made. There shall be no separate payment made for the adjustments. Payment for adjustments shall be included in the unit prices for the various paving items in the Schedule of Prices.

New paving shall be guaranteed for one year from the date of completion of the Contract. Any settlement noted within the one-year guarantee period shall be cut out and replaced to the proper grade, at no additional cost. Where road surfaces are to be overlaid the Contractor shall apply an asphalt emulsion tack coat at the rate of 0.075 gallons per square yard of surface to be overlaid. There shall be no separate payment made for the tack coat, and it shall be included in the unit prices bid for the various paving items.

Where road surfaces are overlaid curb-to-curb or gutter-to-gutter, private lawns or public sidewalks which are needlessly damaged by the work shall be restored to their original conditions at no additional cost. Where regrading work is required, side slopes in or adjacent to the sidewalk areas shall be loamed and seeded at the direction of the Engineer. This will be paid for under Item 17 in the Schedule of Prices, as applicable to the location.

240.03 Pavement.

- A. **Cold Planing (Curb to Curb at Access Points Per State Regulations).**
This work consists of Class III Cold Planing of gutter lines to a depth of 1-1/2-inches on local roads at the locations as indicated on the Contract Drawings. The existing materials will not be re-used on site and shall be removed by the Contractor.

The work shall include the survey and location of all potentially affected existing utility frames and covers and gate boxes, the protection of and/or resetting of all affected utility frames, covers and gate boxes. The work shall include the submittal of a production plan indicating the number and types of cold planers to be employed, length and width of each milling pass, number and type of sweepers to be used, accommodation of traffic through the work zone, weather limitations, protection of affected infrastructure and/or property from damage, prevention of reclaimed asphaltic material entering drainage structures or adjacent properties and amount of water to be used.

The remaining asphaltic base shall be thoroughly swept clean and asphaltic emulsion tack coat applied just prior to installation of new

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asphaltic surfacing. The replacement asphaltic pavement shall be placed to an elevation to maintain the existing grades and roadway crown prior to placement of the permanent pavement.

- B. Payment for Cold Planing (Curb to Curb at Access Points Per State Regulations).** The quantity to be paid for under Item No. 14 in the Schedule of Prices is the area indicated on the Contract Drawings as measured in the field in square yards. The price stated is full compensation for all labor, materials, and equipment for protecting and/or resetting existing frames and covers and gate boxes, cold planing and removal of existing asphaltic roadway surface materials and compacting the gravel base, for maintaining the base until the permanent pavement overlay is in place, and for all work and expense incidental thereto, complete and accepted by the Engineer.

Payment for Cold Planing by the Contractor during final restoration of local or state roadway areas disturbed by temporary bypass pipe trenching operations **shall be included separately under Item No. 8** in the Lump Sum Price for Phased Temporary Bypass Pumping.

- C. 2" Bituminous Pavement Patch Class 9.5 HMA.** As soon as utility trenches for sewers, water and/or drainage are installed and backfill has been thoroughly compacted, a 2" bituminous concrete pavement patch shall be placed over all trenches without any overlapping.

The pavement patch shall consist of a 2-inch course of hot plant mix bituminous concrete, Class 9.5 HMA, placed on a well compacted 12" gravel base, as detailed on the Plans. The bituminous pavement patch shall be placed to an elevation to maintain the roadway crown prior to placement of the permanent pavement.

- D. Payment for 2" Bituminous Pavement Patch Class 9.5 HMA.** The quantities to be paid for under Item 15 in the Schedule of Prices is the tonnage of bituminous concrete material, measured in tons, actually placed as indicated on the Plans and/or by direction of the Engineer for 2" bituminous concrete pavement patch placed over roadway trenches. The price stated is full compensation for all labor, materials and equipment for providing, placing and compacting the 12-inch gravel base, the 2-inch bituminous concrete patch, for temporary striping, for maintaining the pavement patch until the permanent pavement overlay is in place, and for all work and expense incidental thereto, complete and accepted by the Engineer.

Payment for 2" Bituminous Pavement Patch Class 9.5 HMA installed by the Contractor for temporary bypass pipe trenching operations **shall be included separately under Item No. 8** in the Lump Sum Price for Phased Temporary Bypass Pumping.

- E. 2" Bituminous Pavement Patch Class 12.5 HMA.** As soon as utility trenches for sewers, water and/or drainage are installed and subsequent pavement layers have been thoroughly compacted, a 2" bituminous

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concrete pavement patch shall be placed over all trenches without any overlapping.

The pavement patch shall consist of a 2-inch course of hot plant mix bituminous concrete, Class 12.5 HMA, placed over binder or base course as detailed on the Plans. The bituminous pavement patch shall be placed to an elevation to maintain the roadway crown prior to placement of the permanent pavement.

- F. **Payment for 2" Bituminous Pavement Patch Class 12.5 HMA.** The quantities to be paid in the Schedule of Prices is the tonnage of bituminous concrete material, measured in tons, actually placed as indicated on the Plans and/or by direction of the Engineer for 2" bituminous concrete pavement patch placed over roadway trenches. The price stated is full compensation for all labor, materials and equipment for providing, placing and compacting 2-inch bituminous concrete patch, for temporary striping, for maintaining the pavement patch until the permanent pavement overlay is in place, and for all work and expense incidental thereto, complete and accepted by the Engineer.

Payment for 2" Bituminous Pavement Patch Class 12.5 HMA installed by the Contractor for temporary bypass pipe trenching operations **shall be included separately under Item No. 8** in the Lump Sum Price for Phased Temporary Bypass Pumping.

- G. **Modified Class 12.5 HMA Bituminous Binder Course.** As soon as utility trenches for sewers, water and/or drainage are installed, backfill has been thoroughly compacted, and plan specified base course has been installed, a layer of modified class 12.5 HMA binder course shall be installed at plan specified depth prior to surface course placement.

The binder course layer shall consist of hot plant mix bituminous concrete, Modified Class 12.5 HMA, installed to plan specified depth and placed over a base course as detailed on the Plans.

- H. **Payment for Modified Class 12.5 HMA Bituminous Binder Course.** The quantities to be paid in the Schedule of Prices is the tonnage of bituminous concrete material, measured in tons, actually placed as indicated on the Plans and/or by direction of the Engineer for bituminous binder course placed within roadway trenches. The price stated is full compensation for all labor, materials and equipment for providing, and for placing and compacting bituminous concrete binder at plan specified depths, and for all work and expense incidental thereto, complete and accepted by the Engineer.

Payment for Modified Class 12.5 HMA Bituminous Binder Course installed by the Contractor for temporary bypass pipe trenching operations **shall be included separately under Item No. 8** in the Lump Sum Price for Phased Temporary Bypass Pumping.

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- I. **Class 19.0 HMA Bituminous Base Course.** As soon as utility trenches for sewers, water and/or drainage are installed, gravel borrow has been thoroughly compacted and/or concrete roadway base restoration has been completed, a layer of class 19.0 HMA base course shall be installed at plan specified depth prior to placement of binder course.

The base course layer shall consist of hot plant mix bituminous concrete, Class 19.0 HMA, installed to plan specified depth and placed over either gravel borrow subbase or newly restored cement concrete roadway base course as detailed on the Plans.

- J. **Payment for Class 19.0 HMA Bituminous Base Course.** The quantities to be paid in the Schedule of Prices is the tonnage of bituminous concrete material, measured in tons, actually placed as indicated on the Plans and/or by direction of the Engineer for bituminous base course placed within roadway trenches. The price stated is full compensation for all labor, materials and equipment for providing, and for placing and compacting bituminous concrete base course at plan specified depths, and for all work and expense incidental thereto, complete and accepted by the Engineer.

Payment for Modified Class 19.0 HMA Bituminous Base Course installed by the Contractor for temporary bypass pipe trenching operations **shall be included separately under Item No. 8** in the Lump Sum Price for Phased Temporary Bypass Pumping.

- K. **1" Bituminous Leveling Course and 1-1/2" Bituminous Overlay Class 9.5 HMA Surface Course.** After the trenches have fully settled and the trenches restored to proper grade, but not before 75 days after installation of the pipelines, weather permitting, local streets shall be prepared and shall subsequently be provided with a 1-1/2 inch bituminous concrete overlay from curb line to curb line or gutter line to gutter line. The sequence of operations is as follows:

First, a three-foot wide strip shall be cold planed along each gutter line as determined by the Contractor to properly match grade, and driveway pavements shall be cut and prepared as detailed on the plans. Following the cold planing operation, the existing road surface shall be swept clean with a motorized street sweeper of all sand and debris. Loose or broken pavement shall be removed and disposed of as previously specified in these Specifications. Existing potholes, depressions or holes resulting from the removal of loose or broken pavement or material displaced by cold planing or sweeping within limits of the proposed overlay shall be filled with bituminous material. Edge or surface irregularities shall be smoothed out or straightened, a leveling course shall be placed to create a roadway crown where required and as directed by the Engineer. Existing drainage or sewer structures, gas or water roadway boxes or any other roadway utilities shall be adjusted to grade as previously specified.

Second, the road surface shall have an asphalt emulsion tack coat applied at the rate of 0.075 gallons per square yard immediately prior to

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overlay, and finally, a 1-1/2 inch bituminous concrete surface course Class 9.5 HMA shall then be placed over the prepared surface.

- L. **Payment for 1" Bituminous Leveling Course and 1 1/2" Bituminous Overlay, Class 9.5 HMA Surface Course.** The quantities to be paid for under Items 16-17 in the Schedule of Prices is the tonnage of bituminous concrete material, measured in tons, based on certified delivery slips, actually placed as indicated on the Plans and/or by direction of the Engineer for 1½-inch overlay pavement. The price stated is full and complete compensation for sweeping and cleaning, tack coat, removal and disposal of broken or loose pavement, saw cutting of street pavements, saw cutting side streets, and cut and match areas as required, filling of potholes or depressions, adjusting of all drainage or sewer structures or water or gas roadway boxes, replacing and or rebuilding any damaged structures or castings, temporary bituminous wedges, for all hauling, spreading, shaping, rolling and compaction of bituminous concrete material for leveling courses, for new pavement markings; and for furnishing all labor, equipment, tools, and for all work and expense incidental thereto, complete and accepted by the Engineer.

Payment for 1" Bituminous Leveling Course and 1 1/2" Bituminous Overlay, Class 9.5 HMA Surface Course installed by the Contractor during final restoration of local roadway areas disturbed by temporary bypass pipe trenching operations **shall be included separately under Item No. 8** in the Lump Sum Price for Phased Temporary Bypass Pumping.

No payment will be made for material that arrives on the site without delivery slips, material used for trench patch maintenance or filling of settled pavement areas or material in excess of the allowances indicated in the RIDOT Standard Specifications.

- M. **1" Bituminous Leveling Course and 1-1/2" Bituminous Overlay Class 12.5 HMA Surface Course.** After the trenches have fully settled and the trenches restored to proper grade, but not before 75 days after installation of the pipelines, weather permitting, state roads shall be prepared and shall subsequently be provided with a 1-1/2 inch bituminous concrete overlay from curb line to curb line or gutter line to gutter line. The sequence of operations is as follows:

First, a three-foot wide strip shall be cold planed along each gutter line as determined by the Contractor to properly match grade, and driveway pavements shall be cut and prepared as detailed on the plans. Following the cold planing operation, the existing road surface shall be swept clean with a motorized street sweeper of all sand and debris. Loose or broken pavement shall be removed and disposed of as previously specified in these Specifications. Existing potholes, depressions or holes resulting from the removal of loose or broken pavement or material displaced by cold planing or sweeping within limits of the proposed overlay shall be filled with bituminous material. Edge or surface irregularities shall be smoothed out or straightened, a leveling course shall be placed to create a roadway crown where required and as directed by the Engineer.

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Existing drainage or sewer structures, gas or water roadway boxes or any other roadway utilities shall be adjusted to grade as previously specified.

Second, the road surface shall have an asphalt emulsion tack coat applied at the rate of 0.075 gallons per square yard immediately prior to overlay, and finally, a 1-1/2 inch bituminous concrete surface course Class 12.5 HMA shall then be placed over the prepared surface.

- N. Payment for 1" Bituminous Leveling Course and 1 1/2" Bituminous Overlay, Class 12.5 HMA Surface Course.** The quantities to be paid in the Schedule of Prices is the tonnage of bituminous concrete material, measured in tons, based on certified delivery slips, actually placed as indicated on the Plans and/or by direction of the Engineer for 1 1/2-inch overlay pavement. The price stated is full and complete compensation for sweeping and cleaning, tack coat, removal and disposal of broken or loose pavement, saw cutting of street pavements, saw cutting side streets, and cut and match areas as required, filling of potholes or depressions, adjusting of all drainage or sewer structures or water or gas roadway boxes, replacing and or rebuilding any damaged structures or castings, temporary bituminous wedges, for all hauling, spreading, shaping, rolling and compaction of bituminous concrete material for leveling courses, for new pavement markings; and for furnishing all labor, equipment, tools, and for all work and expense incidental thereto, complete and accepted by the Engineer.

Payment for 1" Bituminous Leveling Course and 1 1/2" Bituminous Overlay, Class 12.5 HMA Surface Course installed by the Contractor during final restoration of state roadway areas disturbed by temporary bypass pipe trenching operations **shall be included separately under Item No. 8** in the Lump Sum Price for Phased Temporary Bypass Pumping.

No payment will be made for material that arrives on the site without delivery slips, material used for trench patch maintenance or filling of settled pavement areas or material in excess of the allowances indicated in the RIDOT Standard Specifications.

- O. Payment for 2 1/2" Driveways & 3" Sidewalks, Class 9.5 HMA Surface Course.** The quantity to be paid in the Schedule of Prices is the tonnage of bituminous concrete material, measured in tons, based on certified delivery slips, actually placed in private driveways as detailed on the Plans and/or by direction of the Engineer. The price stated is full and complete compensation for removal and disposal of existing pavement as required, replacing and compacting gravel as required, for all hauling, spreading, shaping, rolling and compaction of bituminous concrete material and for furnishing all labor, equipment, tools, and for all work and expense incidental thereto, complete and accepted by the Engineer. No payment will be made for material that arrives on the site without delivery slips, material used for maintenance or filling of settled pavement areas or in excess of the allowances indicated in the RIDOT Standard Specifications.

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Payment for 2 ½" Driveways & 3" Sidewalks, Class 9.5 HMA Surface Course installed by the Contractor for temporary bypass pipe trenching operations **shall be included separately under Item No. 8** in the Lump Sum Price for Phased Temporary Bypass Pumping.

- P. Payment for Saw Cutting Bituminous Concrete Pavement at Private Driveways (All Depths).** The bituminous concrete pavement at driveway final roadway match locations shall be saw cut (full depth) as detailed on the Plans in preparation for final pavement overlay. The quantity to be included in the Schedule of Prices is the length of saw cut actually made, measured in feet across the driveway. The price shall constitute full and complete compensation for saw cutting bituminous concrete pavement at driveways, including all equipment, water, and labor, complete and accepted by the Engineer.

No separate payment for Saw Cutting Bituminous Concrete Pavement at Private Driveways (All Depths) will be made. Payment shall be included in the various pavement items in the Schedule of Prices.

- Q. Payment for Bituminous Wedges.** In preparation for pavement overlay, following adjustment of manhole and/or catch basin frames or roadway boxes, and at cut and match areas, bituminous wedges, Class 9.5 HMA, shall be installed around all existing manhole covers, catch basin grates and utility boxes within the pavement overlay area, or prepared driveways for which pavement will be delayed more than 24 hours. A tack coat shall be applied before installing wedges. Bituminous wedges shall be installed as detailed on the Plans and shall be maintained until the permanent pavement is placed.

No separate payment for bituminous wedges shall be made. Payment for bituminous wedges shall be included in the pavement items in the Schedule of Prices.

- 240.04 Remove and Reset/Restore Existing Curbing.** Wherever it shall be necessary to remove or disturb granite or precast concrete curbing, said curbing shall be carefully protected from injury and reset to the required line and grade on a bed of gravel 8-inches thick and locked in with concrete on the front and back side to the level of the roadway's bituminous base. Bituminous lip curbing so destroyed by construction work shall be replaced completely in kind.

No separate payment for replacing or resetting granite, cobblestones, precast concrete or bituminous curbing/berm will be made. Payment is included in the various pavement items in the Schedule of Prices.

- 240.05 Calcium Chloride.** The Contractor shall furnish and apply approved dust control material to the surface of gravel trench fills or elsewhere as directed by the Engineer. The dust control material shall be calcium chloride and shall conform to the requirements of the latest ASTM Specification for such material.

- A. Payment for Calcium Chloride.** The quantity to be paid for under Item No. 6 in the Schedule of Prices is the number of pounds of calcium chloride actually applied in the work. The price stated is full

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compensation for furnishing, hauling and applying calcium chloride and for all other work incidental thereto.

240.06 Cast in Place Concrete. Class A concrete, either plain or reinforced, shall be used on this project for footings, foundations, pipe cradles, chimney connections, thrust blocks, sewer manhole bases, or whenever and wherever it is required to complete the work in accordance with the Plans and as directed by the Engineer. At the direction of the Engineer, excavatable flowable concrete fill shall be utilized to minimize settlement around existing utilities.

A. Materials.

1. Portland cement, air entrained, shall conform to the requirements of Paragraphs 601.02.1 and M.02.01 of the Rhode Island Standard Specifications.
2. Fine and coarse aggregate and water shall conform to the requirements of Paragraphs M.02.02, M.02.03, and M.02.07, respectively, of the Rhode Island Standard Specifications.

B. Proportioning. Materials shall be proportioned according to the requirements indicated for Class "A" concrete in Table 2 of Paragraphs 601.03.01 of the Rhode Island Standard Specifications. Concrete (plain) shall develop a minimum compressive strength of 3000 psi at 28 days. Transit mix is permitted provided strength requirements are satisfied. Excavatable flowable concrete fill, (Type I or II), shall be as indicated in Para. 601.01 of the Rhode Island Standard Specifications.

C. Forms. Substantial forms and supports shall be provided and used to fit the shapes of the work. The forms shall be smooth, clean, tight, and so braced that they shall be rigid when concrete is placed in them. Promptly after the forms have been removed, voids, if any exist, shall be pointed with mortar. Exposed concrete surfaces shall be given a wood float finish, unless otherwise directed by the Engineer.

D. Reinforcing Steel. Reinforcing steel for concrete shall conform to ASTM Standard A615 Grade 60. Reinforcing steel shall be accurately formed to the dimensions indicated on the Plans. All bars shall be bent cold and shall not be straightened or re-bent in a manner that will injure the material.

Reinforcing steel, before being positioned, shall be thoroughly cleaned of mill and rust scale and other coating, including ice, that destroy or reduce the bond with concrete. Epoxy coatings of damaged reinforcement shall be repaired in accordance with the manufacturer's recommendation and applicable sections of ACI Standards.

The reinforcing bars shall be accurately positioned and secured against displacement by using annealed iron wire ties or suitable clips at intersections, and shall be supported by metal supports, spacers or metal hangers.

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Concrete covering over steel reinforcing shall be as indicated on the Plans or as directed by the Engineer.

- E. **Payment for Cast-In-Place Concrete.** The quantity to be paid for under Item No. 18 in the Schedule of Prices is the number of cubic yards, measured in place, of excavatable flowable concrete fill or Class A concrete, either plain or reinforced, used in the various portions of the work, and as ordered placed by the Engineer. The price so stated is full compensation for furnishing all labor, materials, and construction equipment, for placing and removing forms and supports, and for all other work and expense incidental thereto complete, in place, and accepted by the Engineer.

240.07 Loam and Seed. Existing grassed areas disturbed by the Contractor during the construction of this project shall be loamed and seeded so as to be similar in all respects to the area prior to construction and as directed by the Engineer. After the areas to be loamed and seeded have been brought to the proper subgrade and approved by the Engineer, the loam shall be spread to a depth of 4 inches, due allowance being made for settlement. The loam shall not be hauled over, tramped over or packed in any way, and shall be left in a loose and pliable condition. All loam shall be free from subsoil, gravel, roots, and stones. All loam shall be in accordance with RIDOT Standard Specification section M.18.01. The contractor shall provide test data on the material to be placed indicating that the proposed loam is in accordance with the specifications.

The loam shall be fertilized with 16 percent phosphate fertilizer at the rate of one pound to each 130 square feet of area and worked in to a depth of 4 inches. After being settled, and when directed by the Engineer, the loam shall be rolled lightly with a roller, all bumps and hollows smoothed out. The pH should be adjusted by adding lime to about 6.5.

Loamed areas shall be seeded with the following mixtures:

A. **Upland Area:**

MIXTURE	% BY WT.	SEEDING DATES
Red Fescue	70	April 1 June 13
Kentucky Bluegrass	15	Aug. 15 Oct. 15
Colonial Bentgrass	5	
Perennial Ryegrass	10	

Spreading Rate: 100 lbs. per acre.

B. **Wetland Area:**

MIXTURE	POUNDS PER ACRE	SEEDING DATES
Reed Canary Grass	20	May 1 June 15
Ladino White Clover	1	Aug. 15 Sept. 30

Spreading Rate: 21 lbs. per acre.

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- C. **RIDOT Standard Specification Seed Mixes**, Type 2 Residential and Type 6 Wildflower.

The seed shall be fresh and clean, and free from weed seed, chaff and other extraneous materials. The seed shall be raked in with a fine-toothed rake. After the seed is sown, the surface of the ground shall be thoroughly rolled with a suitable roller. All seeded areas shall be watered and maintained to the satisfaction of the Engineer. In case the work is completed at a time when it cannot be seeded, the surface shall be protected against erosion and the seed shall be sown at the earliest date favorable for seeding. Any seeded areas that become eroded or grown up to weeds, or which do not grow an acceptable growth of grass, shall be reseeded at the Contractor's expense.

The above specification shall apply to new grassed areas with respect to methods of construction and material.

- D. **Payment for Loam and Seed**. The quantity to be paid for Loam and Seed is the area in square yards of **new** grassed areas, measured in place, at locations indicated on the Plans or as directed by the Engineer. The price stated is full compensation for the placing of loam, seed, and fertilizer, for watering all new grassed areas, and for all work and expense incidental thereto, complete and accepted by the Engineer.

Payment for furnishing and placing loam and for fertilizing, seeding, hay mulch and maintaining the existing grassed areas disturbed by the Contractor during construction of this project **shall be included separately under Item No. 8** in the Lump Sum Price for Phased Temporary Bypass Pumping.

240.08 Cement Concrete Driveways. This work includes the removal and disposal of existing cement concrete driveways over trench locations, and placement of new cement concrete driveways as indicated on the Contract Drawings and as directed by the Engineer. Methods and materials used in the construction of cement concrete driveways shall conform to the Rhode Island Standard Specifications for Road and Bridge Construction, 2004 Edition, as amended. All cement concrete driveways must be constructed in compliance with the 'Americans with Disabilities Act Accessibility Guidelines (ADAAG)'.

- A. **Payment for Cement Concrete Driveways**. The quantity to be paid for Cement Concrete Driveways is the number of cubic yards, measured in place, of cement concrete driveways constructed as required for temporary bypass trench restoration as approved by the Engineer and includes full compensation for furnishing all labor, materials, and construction equipment, for removing and disposing existing cement concrete driveways, placing and removing forms and supports, and for all other work and expenses incidental thereto complete, in place, and accepted by the Engineer.

Payment for cement concrete driveways installed by the Contractor during final restoration of driveway areas disturbed by temporary bypass pipe trenching operations **shall be included under Item No. 8** in the Lump Sum Price for Phased Temporary Bypass Pumping.

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END OF SECTION

**CLOSE FIT CURED-IN-PLACE PIPE (CIPP) REHABILITATION
OF PRESSURIZED NON-POTABLE PIPING**

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250.00 CLOSE FIT CURED-IN-PLACE PIPE (CIPP) REHABILITATION OF PRESSURIZED NON-POTABLE PIPING.

250.01 General.

- A. Summary.** It is the intent of this specification to provide for the reconstruction of the designated pressure pipe by installation of a new cured-in-place-pipe (CIPP) within the existing (host) pipe. The CIPP shall be designed as a fully structural Class IV pipe, not relying on the remaining strength or water tightness of the host pipe to withstand long-term external loading and internal pressure, or as a semi-structural Class III pipe, where the host pipe shall carry the long-term external loads and be capable of accommodating the full internal pressure; Class III liners are intended to span specified holes and gaps.

In case of conflicting requirements between this specification and the AWWA standards, this specification will govern.

B. References.

ASTM D578 – Standard Specification Glass Fiber Strands

ASTM D638 – Standard Test Method for Tensile Properties of Plastics

ASTM D790 – Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials

1. ASTM D2122 – Standard Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings
2. ASTM D3567 – Standard Practice for Determining Dimensions of “Fiberglass” (Glass-Fiber-Reinforced Thermosetting Resin) Pipe and Fittings
3. ASTM D5813 – Standard Specification for Cured-in-Place Thermosetting Resin Sewer Piping Systems
4. ASTM F1216 – Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube
5. ASTM F1743 – Standard Practice for Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of Cured-in-Place Thermosetting Resin Pipe (CIPP)
6. ASTM F2019 – Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Pulled in Place Installation of Glass Reinforced Plastic Cured-in-Place (GRP-CIPP) Using the UV-Light Curing Method
7. AWWA M28 – Rehabilitation of Water Mains
8. AWWA Committee Report – Structural Classifications of Pressure Pipe Linings
9. 29 CFR 1910.146 – Occupational Safety and Health Standards – Permit

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Required Confined Spaces

10. 29 CFR 1926.650 – Safety and Health Regulations for Construction – Scope, Application and Definitions Applicable to this Subpart
11. 29 CFR 1926.651 – Safety and Health Regulations for Construction – Specific Excavation Requirements
12. 29 CFR 1926.652 – Safety and Health Regulations for Construction – Requirements for Protective Systems

250.02 Submittals.

A. Product, Manufacturer/Installer Qualifications

1. All trenchless rehabilitation products and installers must be pre-approved prior to the formal opening of bids. No later than two weeks before the formal proposal due date, each proposer shall submit to the Owner the required prequalification submittals designated in Section 250.02-A.2. After the evaluation of the data, the Owner will notify those firms that have produced acceptable submittal packages that they are qualified to furnish proposals for this project. The Owner's decision shall be final.
2. The following submittals to the Owner are required to meet that which is stated in Section 250.02-A.1 above:
 - a. The fully structural, Class IV CIPP liner system utilized for reconstruction of the designated pressure pipe shall be as manufactured by Insituform Technologies, LLC, or approved equal.
 - b. To be Commercially Proven, an Installer must satisfy all insurance, financial, and bonding requirements of the Owner, and must have had at least 10 (ten) years active experience and a minimum of 500,000 linear feet of commercial installation of pressure rated CIPP products in pressure pipe applications. Acceptable documentation supporting the above must be submitted to the Owner.
 - c. The CIPP tube manufacturer, resin impregnation facility, and lining installer all shall operate under a quality management system which is third-party certified to ISO 9000 or other internationally recognized organization standards. Additionally, if the lining installer is not the CIPP tube manufacturer, the lining installer must be formally licensed by the CIPP tube manufacturer to install the product. Proof of ISO certification and licensing status, as applicable, shall be required for approval.
 - d. Design - Detailed design calculations for both the internal and external loading parameters specified in Section 250.04 shall be submitted for review and approval. The CIPP shall be designed as per ASTM F1216, Appendix X1.3.2 for the Fully Deteriorated Pressure Pipe condition and shall follow the requirements

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specified in Section 250.04.

3. For a Manufacturer – i.e., saturation company – to be Commercially Proven, the liner impregnation must occur at a permanent wet out facility that is legally permitted with any/all local, state and federal agencies. A permanent facility is one that is:
 - a. An existing, free-standing structure with a permanent power supply.
 - b. A legally permitted facility that is zoned and has a certificate of occupancy for its intended use.
 - c. Has written approval from a fire marshal for its intended use.
 - d. Has local or state environmental protection agency approval (see Section 250.02-B for more detail).

B. Environmental Health and Safety Fixed Facility Requirements

1. Proof of the below criteria must be submitted with the bid to be deemed responsive.
2. Air Quality – Each saturation facility must present a Federally Enforceable State Operating Permit (FESOP). Since each facility has hazardous air pollutants (HAP's) and volatile organic compounds (VOC's), it will fall into the Federally mandated State operated program and should be required to produce an operating permit.
3. Hazardous Waste – Each saturation facility produces hazardous waste. Therefore, to be compliant with Environmental Law (40 CFR) each facility must be registered into one of three categories (very small, small, or large quantity generator) depending on the volume of waste that is generated. This would require each site to produce an Annual Hazardous Waste report. Therefore, the facility should produce an EPA ID number and the previous year's annual waste report.
4. Storm Water Permit – Each saturation facility will need a storm water discharge permit. This permit is issued under the State Environmental regulatory agency and ensures that there is no discharge of any chemicals into drains or storm water discharge. The facility should produce a "no exposure certification" issued by the State.
5. EPCRA Tier II Compliance – These are Federally mandated regulations that are implemented by State agencies. Each saturation facility that stores listed Tier II chemicals to operate the saturation of the dry tube must meet these requirements. Storage of Tier II chemicals requires EPA Tier II submittal per chemical.
6. Integrated Contingency Plan – Each facility must have an Integrated Contingency Plan (also known as the Emergency Response Plan). This plan covers location of chemical storage, quantities stored, facility maps with emergency evacuation plans and emergency response notification,

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and procedures in the event of a spill or release of hazardous waste or chemicals as per 40 CFR.

7. Annual Environmental Audits – Each saturation facility should be regularly audited by environmental personnel to show compliance with Federal and State EPA requirements.
8. Waste Reduction Program – Each saturation facility must provide EPA with improvement efforts in the reduction of solid and hazardous waste per 40 CFR.
9. California Proposition 65 – Each saturation facility within the State of California that uses chemicals listed under Proposition 65 are required to notify employees and the general public of this exposure. Per Proposition 65 law, this must be communicated via signage near the point of exposure.
10. Employee Training Records – Each facility should develop a record keeping system to document all regulatory training conducted for employees. This would include EPA, OSHA and DOT agencies.
11. OSHA – Each facility must produce a checklist that addresses the following Safety topics: Injury and Illness Prevention Plan (Safety Manual), Emergency Evacuation Plan, proper flammable and peroxide storage, proper fire protection per NFPA code (fire extinguishers, sprinkler systems, proper grounding), Lockout-Tagout Program, proper safety labeling for tanks and drums of raw materials (NFPA, HMIS), spill kits, walking and working surfaces, hazard communication, hoist and sling inspections, PPE and electrical.

C. Product Manufacturer Approvals

1. To ensure that the finished product meets the quality control standards set forth by the Owner, all CIPP liners shall be impregnated by a facility that is approved by the product's Manufacturer (both dry liner and resin).
2. Proof of the above criteria must be submitted with the bid to be deemed responsive.

250.03 Materials.

- A. The CIPP tube product shall consist of one or more layers of absorbent woven and/or non-woven synthetic fiber, with glass or woven fiber reinforcement, which is fabricated in the USA. The CIPP tube is then impregnated with a thermoset resin system that is compatible with the installation process being used.
- B. The tube shall be fabricated to dimensions such that when installed will fit tightly to the internal circumference of the host pipe being lined, making allowance for stretching during installation. Accurate measurement, in at least four clock angles (E.g., 3 o'clock to 9 o'clock; 12 o'clock to 6 o'clock; 10 o'clock to 4 o'clock; 2 o'clock to 8 o'clock), of the host pipe internal diameter shall be undertaken prior to ordering/fabricating the tube.

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- C. In the installed state, the inside layer of the tube shall be coated with a translucent, flexible plastic material that acts to separate the curing heat medium from the thermoset resin system undergoing cure.
- D. The tube shall provide a finished thickness that complies with CIPP industry standards that when compressed at installation pressures will meet or exceed the minimum required thickness specified in the design submittals.
- E. Fabricate tube from materials which, when cured, will be chemically resistant to internal exposure to drinking water treated with common chemical additives.
- F. The tube shall contain no intermediate or encapsulated elastomeric layers. The tube shall contain reinforcement (glass, woven fiber, or equal) to withstand the internal pressure design requirements, in a configuration determined by the manufacturer. This may result in an anisotropic cross-section.
- G. The wall color of the interior pipe surface of the CIPP after installation shall be a light reflective color so that a clear detail examination may be made of the final product.
- H. Materials that are defective, damaged, or otherwise deemed unacceptable for use prior to installation shall be rejected and replaced at Contractor's expense. Liner materials damaged during installation shall be repaired or replaced as recommended by the Contractor and approved by the Owner.

250.04 Structural Requirements.

- A. The liner shall be characterized and proven as detailed in AWWA Manual M28, with appropriate reference to AWWA Committee Report, Structural Classification of Pressure Pipe Liners. It shall be designated and designed to provide a Class IV Fully Structural Liner or Class III Semi-structural Liner as identified by the Owner's Design Intent and requirements.
- B. The CIPP shall be designed as per ASTM F1216, Appendix X1.3.2 for the Fully Deteriorated Pressure Pipe condition and shall be provided as a prequalification submittal. These detailed calculations shall provide the input data as well as the actual calculation for Eqs X1.1, X1.3, X1.4 and X1.7 of Appendix X1. of ASTM F1216. The design submittal shall also clearly identify the physical properties used for design. Design shall also verify axial strength to meet specifications. The liner design shall not require or infer full length adhesion or bond to the host pipe, providing a liner totally independent of the host pipe.
- C. Other than what is allowed in ASTM F1216, the CIPP design shall assume no contribution from the original host pipe.
- D. The design of the CIPP shall be based on the following parameters:

Diameter	_____	, inch
Internal Design Pressure	_____	, psi
Internal Vacuum, if applicable	_____	, psi
Ovality	_____	, %
Soil Depth (above invert)	_____	, feet
Ground Water Depth (above invert)	_____	, feet

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Type of Live Load _____
Modulus of Soil Reaction _____, psi
Soil Density _____, pcf
Surge _____, psi

- E. The physical properties used in the design submittal shall be clearly identified. At a minimum, the CIPP shall have the following physical properties:

PROPERTY	ASTM TEST METHOD	MINIMUM VALUE*
Initial Flexural Modulus of Elasticity	D790	400,000 psi
Initial Flexural Strength	D790	7,000 psi
Initial Tensile Strength	D638**	6,500 psi

*Values are for design conditions @ 75°F (25°C)

** For materials that do not allow sufficiently accurate hoop/weft testing per ASTM D638, initial tensile strength may also be substantiated by short-term burst testing results or ASTM D2290 hoop test results.

250.05 Installation.

A. Project Planning

1. The Owner shall ensure proper access to the pipeline. The Contractor shall provide adequate notice to the Owner prior to mobilization. The Owner will notify customers and local fire department following receipt of the Contractor's notice.
2. Water necessary for cleaning, flushing, and pressure testing will be available, at no cost, from locations (fire hydrants) indicated by the Owner prior to the start of Work. Water sources provided shall be in close proximity to the access pits for the pipes within the project scope. The Contractor shall provide necessary piping or flexible hoses, fittings, and approved reduced pressure zone backflow prevention device for connection between fire hydrant and end of pipe section where water is required. The contractor shall acquire meter from Warwick Water Department. The contractor shall contact Warwick Water Department for list of suitable hydrant locations for connection. The Owner shall provide a location convenient to the access pits at no cost to the Contractor (e.g., sanitary sewer, etc.) for proper disposal of water after use.

B. Shoring and Excavation

1. The Contractor shall be responsible to provide excavations and shoring that meet or exceed all applicable OSHA requirements as contained in regulations 29 CFR 1926.650 through 29 CFR 1926.652, including Appendix A through F. The Contractor, or any persons, shall not be allowed to enter an excavation unless in compliance with all applicable OSHA regulations.
2. Unless excavated in rock, all excavations shall be considered Type 'C' soil, classified as "previously disturbed", as per Appendix A in 29 CFR

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1926.650.

3. Trench excavations shall have access and egress ladders, ramps, or stairs provided for employees on any excavation which is 4 feet or more in depth. Ladders will be located within 25 feet of the workers, will be within the shored structure, will extend to a height of at least 3 feet above the excavation, and will be securely tied to the shoring box. Lateral travel along the wall of the trench to a ladder or other means of egress will not exceed 25 feet.
4. Provide a system of shoring in accordance with specifications in 29 CFR 1926.652 and Appendices 'A' and 'C' of OSHA standards for excavation.
5. All holes, pits, trenches 5 feet or more in depth (depth is measured from lowest point of hole to top of excavation) shall have an OSHA approved shoring system in place such as:
 - a. Speed Shore
 - b. Build-A-Box
 - c. Mechanical shielding
 - d. Hydraulic shoring
 - e. No plywood or timbers unless signed off by a licensed Professional Engineer. Only plywood to be used is 14-ply artic white birch (Finland Form)
 - f. Shoring must extend on all 4 sides unless sloped at ends
 - g. Shoring must not be more than 24 inches from bottom of pit
 - h. All spoil must be kept back a minimum of 24 inches from edge of excavation
 - i. All excavations 20 feet or deeper require a licensed Professional Engineer to design and stamp
6. A copy of the tabulated data for each particular system is to be kept on job site.
7. The Contractor shall identify the Competent Person(s) responsible for all excavations and shoring. The Competent Person(s) shall have the authority and the responsibility to immediately cease construction site activities should unsanitary, hazardous or dangerous conditions be observed, and to take prompt corrective measures to eliminate them.

C. Access, Cleaning and Inspection

1. Prior to entering any permit required confined space the Contractor shall make an evaluation of the atmosphere to determine the presence of toxic or flammable vapors or lack of oxygen. This shall be undertaken in accordance with local, state, or federal safety regulations.
2. The Contractor shall identify the number and location of access points required. The Owner shall provide rights of access to the pipeline. The Contractor or Owner, as specified in the contract documents, shall provide the excavation, pipe work, reconnection and restoration for access points.

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3. Immediately upon opening the host main at the access points and prior to installation of liner, the ends of the adjacent existing pressure main that are not to be lined at the insertion/extraction points shall be covered/plugged by the Contractor so that no debris shall enter into them during reconstruction work.
4. The Contractor shall remove all internal debris out of the pipeline that will interfere with the installation. Pipes shall be cleaned by the Contractor, as needed, with high-velocity jet cleaners, mechanically powered equipment, cable-attached devices or fluid-propelled devices (e.g., pipe pigs). If required, the Owner shall provide a dump site for all debris removed from the pipe during the cleaning operation. Unless specified otherwise, this site shall be at or near the project site. Any hazardous waste material encountered during this project shall be considered as a changed condition.
5. Verification of readiness to install liner shall be performed by experienced personnel trained in locating services, breaks, obstacles, etc. This may include pipe mandrels or other devices up to and including closed-circuit television or man entry. The interior of the pipeline shall be carefully inspected to determine the location of any conditions that may prevent proper installation of the impregnated tube. A video tape or suitable log shall be kept for reference. It will be the Owner's responsibility to remove any unforeseen obstructions that may prevent liner installation. Owner may direct Contractor to remove these obstructions and reimburse under the terms of the contract.
6. Any external water leaking back into the existing pipeline shall be kept to a minimum to the installer's requirements so as not to interfere with the proper installation and cure of the CIPP liner
7. The Contractor shall field verify the length of pressure main sections to be cleaned and lined.
8. The Contractor shall isolate or remove any air release valves, other valves or other appurtenances that require replacement or that could impede the lining operation from the pressure pipe section prior to liner installation.
9. The Contractor shall flush the host pipe with clean water to remove any loose debris from the pipe surface. Wherever practical, remove standing water from the inside surfaces of the cleaned pipeline by passing oversized foam swabs through the main or use a progressive expansion method to remove standing water.
10. The specified lining system is independent of the host pipe, and full-length bond is not required; therefore, surface moisture to the manufacturer's recommendations may be tolerated.

D. Television Inspection

1. When required the Contractor shall perform closed circuit television inspection of existing pressure mains at two intervals: after pipe

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preparation/prior to pressure main lining and upon completion of the lining process. The Contractor shall provide the Owner with a complete set of all CCTV inspections in a format acceptable to the Owner. The picture quality and definition shall be acceptable for viewing and the files shall be compatible with standard DVD or storage device equipment compatible with Owner specified viewing software. Information in the files shall identify the water main section, direction of taping, and the date of inspection. Where applicable, the CCTV files shall include voice description of the location of any identified defects.

E. Resin Impregnation

1. The quantity of resin used for tube impregnation as well as the required gap setting under which the liner is to be impregnated shall be specified by the dry liner manufacturer. During saturation, a vacuum impregnation process (or approved equal) shall be used to ensure thorough resin saturation throughout the length of the felt tube.
2. During resin injection, resin samples shall be collected and tested for exotherm time in a "gel test bath". These tests will serve as a quality control measure for the proper catalyst-resin ratio. Samples shall be collected at the beginning and end of the resin pump based on the resin manufacturer's recommendations, as well as a minimum of (2) gel tests per tube and a minimum of (1) gel test every 2,000 pounds pumped.
3. Evidence of proper saturation and catalyzation shall be provided with every liner installed on the job. This will be in the form of "gel test" logs as well as wet-out report documenting including the following:
 - a. Dry liner and resin manufacturer LOT numbers
 - b. Diameter, thickness, length information
 - c. Actual pounds of resin per liner
 - d. Recommended gap setting
 - e. Liner manufacturer's maximum/minimum/ideal heads/pressures
 - f. Resin manufacturer's recommended cure times at minimum interface temperatures.
 - g. Proper DOT Compliance for shipping of wet-out tubes, and proper truck placarding
4. The leading edge of the resin slug shall be as near to perpendicular as possible. A roller system shall be used to uniformly distribute the resin throughout the tube. If the Installer uses an alternate method of resin impregnation, the method must produce the same results. Any alternate resin impregnation method must be proven and accepted by the liner manufacturer.
5. Owner reserves the right to inspect any and all saturations being performed for the project. The cost of an initial inspection of the facility and witnessing of a liner impregnation must be borne by the Contractor and must take place during normal business hours or a mutually agreed upon time. During the inspection of the facility, the Owner's representative reserves the right to meet with the local fire marshal onsite. Such a meeting shall be coordinated by the facility. Evidence of a legally

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permitted facility as specified in Section 250.02-A.3 shall be provided by the contractor during the onsite visit.

F. Installation

1. The wet-out tube shall be inserted through an approved access point by means of a pull-in place method or a direct inversion process, or a combination of the two. The installation pressure or head used to extend the liner tube through the entire length of pipe being rehabilitated shall be sufficient to fully extend and expand the tube both circumferentially and longitudinally. The installation head may be provided by water or air pressure. The Manufacturer shall provide installation head envelope for each installation.
2. Before the installation begins, the Contractor shall determine the minimum pressure required to hold the tube tight against the existing pipeline, and the maximum allowable pressure to prevent tube damage. In order to ensure a proper fit of the CIPP tube to the host pipe, the pressure shall be maintained between the minimum and maximum pressures until the installation has been completed. The Manufacturer shall provide installation pressure envelope for each liner.
3. The use of a lubricant during the installation process may be needed to reduce friction. The lubricant used shall be nontoxic and certified for use by the tube manufacturer.

G. Curing

1. After tube installation into the host pipe is completed, the curing process shall be initiated. Appropriate curing procedures are to be followed depending on the curing method selected. For photoinitiated curing, a UV-light system is to be utilized. For heat cured liners, equipment to deliver hot water or steam is to be utilized. The curing process as developed by the Manufacturer shall be followed. The process equipment that is utilized must be certified by the Manufacturer for curing their liner product.
2. For lines where no service connections are included, a Distributed Temperature Sensing (DTS) system that captures a continuous temperature profile along the length of the pipe shall be utilized to monitor curing. The temperature sensing device shall be placed prior to installing the lining system between the impregnated tube and the invert of the existing pipe.

H. Cool-Down

1. Manufacturer's directions for cool-down shall be followed. Care shall be taken in the release of the internal head so that a vacuum will not be developed which could damage the newly installed CIPP.

250.06 Inspection and Testing.

- A. All testing shall meet the requirements of ASTM F1216, and shall include

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consideration of AWWA guidelines referenced herein.

- B. After the cured lining system has been cooled down, a preliminary television inspection of the newly installed liner may be performed to determine that the liner is properly installed. The CIPP shall be pressure tested, with the post video delayed until after the successful testing.
- C. Confirm fit and finish meets the visual classification standards of ASTM D5813 and that the liner is free of excess wrinkling or other feature that reasonably may compromise its functional or structural performance design objective. The finished lining shall be continuous over the entire length and be free from visual defects such as foreign inclusions, pinholes and delaminations. Other defects, such as lifts, folds, fins, or wrinkles will only be acceptable if it can be proven that the reinforcing fabric is not present in this defect. The lining shall be impervious and free of any leakage from the pipe to the surrounding ground or from the ground to the inside of the lined pipe. Secure representative samples for testing. Confined samples for testing to confirm the CIPP flexural strength, flexural modulus, and thickness in accordance with the requirements of ASTM D5813, D790, and ASTM D3567 for each liner installed.
- D. Confined samples may not permit required testing in the hoop direction, which is the critical orientation to confirm strength in pressure pipe liners. In these cases, a flat plate sample shall be prepared to industry standards to accommodate appropriate testing.
- E. The tested samples shall meet or exceed the structural properties as per ASTM F1216, or meet or exceed the structural properties specified in the design, whichever are greater.

250.07 Pressure Testing for Water-Tightness.

- A. Hydrostatic pressure testing for water-tightness shall be undertaken on all CIPP sections identified by the Owner in the contract documents or purchase order and shall be completed after the installation but before the inspection and any reinstatement of the pipe's connections.
- B. Perform a one-hour duration hydrostatic pressure test on the lined pressure pipe, following the methods of the trenchless industry's standard defined within ASTM F1216, Section 8.3. The hydrostatic test will not be undertaken until the Installer confirms that the liner has been properly cooled.
- C. As noted in ASTM F1216, the allowable make-up water during the pressure test shall be 20 U.S. gallons per inch of internal pipe diameter per mile of pipe per day (GIDMD), providing that air has been evacuated from the line prior to testing and the structural pipe lining system has cooled down to ambient temperature.
- D. After the one-hour test, the quantified make up water shall be extrapolated to the 24-hour rate for comparison purposes. Any visible leakage at termination points shall be eliminated. If the loss at test pressure exceeds the allowable, the Contractor shall endeavor to identify the source of the loss and minimize it in a manner acceptable to the Owner. Trapped air can significantly affect internal pressure and may require extensive continued testing until stabilization occurs. The pressure test for water tightness shall be deemed acceptable if that actually

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measured during the one-hour test (which has been extrapolated to a 24-hour day rate) is equal to or less than the volume defined in the allowable make up water rate defined in ASTM F1216, Section 8.3.

250.08 Service Connections and End Fittings.

A. Service Connections in Non-Potable Pressure Pipes

1. Service connections in non-potable pressure pipes are not common. If service connections are found to exist in a non-potable pressure pipe, reconnection is typically accomplished by removing the existing fitting, and installing a replacement connection after lining is completed.

B. CIPP End Termination Fittings

1. Terminating CIPP linings can be performed in one of the following manners:
 - a. If the end of the host pipe is determined to be structurally sound and its inside surface is not deteriorated, the CIPP can be terminated near the end of the host pipe and made watertight using a WEKO® Internal End Seal; or equal. An elastomeric internal seal is mechanically secured onto the inside surface of the cut back CIPP end and at the end of the host pipe inner surface.
 - b. The CIPP can be terminated within a short Fiber Reinforced Polymer (FRP), or other material approved by the Owner, pipe spool section having the same inside diameter as the rehabilitated host pipe and a conventional outside diameter matching the closure pipe used to reconnect the piping system. The selected spool section, with appropriate surface preparation, offers a repeatable, high quality adhesive bond to a clean, dry and prepared material inner surface creating a watertight seal and a secure CIPP connection to accommodate all the stresses that may be created by the CIPP installation. If the Contractor, at his discretion, may also elect to install a WEKO® Internal End Seal at the end of the termination spool section to ensure water tightness.
 - c. Adhesive sealing which attempts to provide a seal between the CIPP and the rehabilitated host pipe wall at the termination will not be accepted.
2. The mechanical end fittings shall be rated by the Manufacturer for the operating pressure specified and be independently tested in conjunction with the proposed liner to ensure a long-term watertight connection, independent of the host pipe.

250.09 Pipeline Reconnection and Cleanup.

- A. After project completion, the Owner or Contractor, as specified by contract documents, shall return the piping system to service by closure of all access pits with appropriate pipe spools, valves, and other relevant pipe fittings. Backfilling of all access pits shall be performed with care to ensure material is properly placed

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and not dropped onto closure pipes and fittings until a suitable depth of material is above the closure pipes/fittings.

- B.** Upon acceptance of the installation, the Contractor or Owner, as specified by contract documents, shall reinstate the project area affected by the operations.

250.10 Payment for Close Fit Cured-In-Place Pipe (CIPP) Rehabilitation of Pressurized Non-Potable Piping.

- A.** The quantity to be paid under Item No. 11 in the Schedule of Prices is the length of Close Fit Cured-In-Place Pipe (CIPP) structural liner installed per linear foot as indicated on the Plans and as specified herein. The price stated is full compensation for installation, curing, inspection and testing of Cured-In-Place lining, labor, tools, construction equipment and materials, and for all other work and expenses incidental thereto, complete and accepted by the Engineer.

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SECTION 02600 – PHASED TEMPORARY BYPASS OPERATIONS

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260.00 PHASED TEMPORARY BYPASS OPERATIONS

260.01 Summary

A. Section Includes:

1. Requirements to maintain existing flow and implement and complete all flow diversions and/or bypass pumping required to complete all Work under this Contract.

260.02 Performance Requirements

- A. It is essential to the operation of the existing sewerage system that there be no interruption of the wastewater 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 Owner/Engineer adversely affects or alters operation of the existing sewage system and/or any other portion or component of the existing collection system including the associated flows; allows the level of sewage 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 work, carry it past his work, and return it to the existing facilities beyond his work.
- C. If septic tanker trucks are utilized to divert flow from existing services, the Owner/Engineer will permit the discharge of flow at the Warwick Wastewater Treatment Plan without charge.
- D. The bypass operation shall be planned in conjunction with the relining project as to restore flow to the existing pipe should there be any construction delays with the CIPP project.
- E. The Owner / 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 system, previously constructed work, work in progress and/or the general public.
- F. The Contractor's attention is directed to the fact that the existing wastewater flow may be affected by high groundwater and rainfall. Increases in normal flow should be expected during periods of wet weather. The Contractor shall therefore take all precautions necessary including monitoring weather forecasts

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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.

- G. In case of damage caused by the failure of the Contractor to take adequate precautions, the Contractor shall repair or replace equipment damaged and shall make Such repairs or rebuild such parts of the damaged work, as the Owner may require, at no additional expense to the Owner.
- H. Work on private property will not be permitted without approval of the Warwick Sewer Authority.
- I. The Contractor's attention is directed to the fact that the number of bypass pumping phases shown on the plans is considered by the Owner to be the maximum number of allowable phases. The Contractor is encouraged to submit a design conforming to the requirements of Section 260.03 that reduces the number of bypass phases below the number shown on the plans. Bypass pumping design submittals involving the least number of separate phases will generally be considered the most advantageous by the Owner.

260.03 Submittals

- A. In accordance with Section 260.02 submit the following:
 - 1. The proposed bypass piping locations provided on the plans are suggested accessible routes and locations only. The Contractor shall determine the size and exact location of proposed bypass pumps and routes as part of their shop drawing submittal, which shall be stamped and certified by a Professional Engineer licensed in the State of the installation. The Contractor is permitted to submit a bypass plan that deviates from the suggested routes and/or phasing methodology shown on the plans, provided that all aspects of the alternate methodology remain in full compliance with the requirements of these specifications.
 - 2. Detailed plans and descriptions outlining all provisions and precautions to be taken regarding the control and handling of existing sewage flows.
 - 3. 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 Owner to ensure proper protection of the facilities and compliance with the requirements herein specified.
 - 4. Qualifications as described herein.
 - 5. Detailed proposal for noise prevention measures and odor control measures for review of at least thirty (30) consecutive calendar days prior to anticipated usage.

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6. Shop drawings for all pumping, piping, temporary ramps, and appurtenances for type and size of equipment required to perform the flow diversion and/or bypass pumping work as required herein.
- B.** The Owner/Engineer reserves the right to limit and/or otherwise restrict the Contractor's overall proposal and/or operations without claim should the Owner/Engineer deem it to be in the Owner's or public's best interest to do so.

260.04 Quality Assurance

A. Qualifications.

1. The design, installation and operation of the 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, and 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 the installation.
6. The contractor shall keep a minimum of five (5) stainless steel wrap-around pipe repair sleeves on-site at all times for emergency repair of either the existing force main or temporary bypass piping. It is the responsibility of the contractor to ensure that the repair sleeves held on-site are quickly accessible during all project phases, meet required pressure ratings and are materially compatible with the existing force main and bypass piping. Any

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unused wrap-around pipe repair sleeves remaining upon completion of the project shall become the property of the Warwick Sewer Authority.

260.05 Special Bypass Requirements

- A. The Contractor's attention is directed to the fact that there may be a number of multi-unit residences and businesses in the project area. Any work affecting the existing sewer, such as sewer rehabilitation and the installation of cured-in-place liners, shall address maintaining flows for these residences and businesses. In cases where flow cannot be maintained shut-downs shall be limited to 24 hours.

260.06 Products

A. General

1. 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.

B. Pumping System(s)

1. All pumping units (primary and secondary) and appurtenances shall be sized properly to handle the flows encountered including increased flows due to wet weather.
2. The bypass will include the required pumps to maintain sewerage flow along with a redundant set up should the primary pumps fail.

C. Piping System(s)

1. All piping systems (primary and secondary) and appurtenance shall be sized properly to handle the flows encountered including increased flows due to wet weather.
2. 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 manhole(s).

D. Power Generating Facilities

1. Include power generating facilities capable of providing all power necessary to operate any primary and secondary pumping systems.
2. Maintain facility to be ready for use if required.

E. Noise Prevention

1. Noise prevention measures for all equipment shall be used to ensure minimum noise impact on surrounding areas.

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2. Measures may include but shall not be limited to insulation, electric pumping units, and hospital grade silencers or mufflers.
3. Noise shall be kept to a minimum particularly if any night, Saturday, Sunday or holiday work be deemed necessary by the Engineer for work under this Contract.
4. 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.

260.07 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 the local Fire, Police and/or Department of Public Works as required by the municipality.

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 48-hour notice to abutters of the temporary restriction of access to their property. The Contractor will make every attempt to schedule his work with as little inconvenience to the property owner as possible.

260.08 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.

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- D. No work shall begin until all provisions and requirements of this Section have been reviewed and approved by the Owner/Engineer.
- E. The Owner/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.

260.09 Payment for Phased Temporary Bypass Operations.

- A. The lump sum stated under Item No. 8 in the Schedule of Prices shall be full compensation for all phased temporary sewer flow bypass operations used to maintain existing flow throughout the duration of construction activities as approved by the Engineer. The price stated is full compensation for all temporary bypass pumping connections, primary and secondary pump and piping, power generating facilities, labor, tools, all construction equipment and materials, and for all other work and expenses incidental thereto, complete and accepted by the Engineer.
- B. The lump sum stated under Item No. 8 in the Schedule of Prices shall additionally include full compensation for all temporary bypass pipe trenching operations beneath local and state roadways, driveways and sidewalks, and for all associated sawcutting, removal of existing asphalt or other existing surface materials, excavation, earthwork, backfill, temporary trench patching and maintenance, resetting and/or replacing existing bituminous or concrete curbing, existing portland cement concrete roadway base removal and final restoration, final restoration and pavement overlay of local and state roadways, final restoration of driveways and sidewalks, loam and seed restoration of all disturbed grassed areas, and all other incidental work and expenses, complete and accepted by the Engineer.

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SECTION 02700 – PIPELINE CLEANING

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270.00 Pipeline Cleaning.

270.01 General.

A. Section Includes.

1. Requirements for cleaning and TV inspection of sewer pipes.

B. Water for Construction.

1. Drawing water from hydrants shall be coordinated with the City of Warwick Water Department.
 - a. Contact Information
Warwick Water Department
935 Sandy Lane
Warwick, RI 02889
(401) 738-2008

C. Related Sections.

1. Section 02600 - Maintaining Existing Flow
2. Section 02800 - Television Inspection

D. References.

1. National Association of Sewer Service Companies
 - a. NASSCO Recommended Specifications for Sewer Collection System Rehabilitation.

270.02 Cleaning and Disposal Requirements.

- A.** The Contractor's attention is directed to the requirements set forth by the State of 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.
- 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 types of debris to be removed.

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- D. Clean pipeline to restore original carrying capacity of the pipe, and suitably to permit lining 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.

270.03 Submittals.

- A. Submit in accordance with Specification Section 01300.
 - 1. Provide detailed plans and descriptions outlining cleaning and television inspection procedures and all provisions and precautions regarding the handling of existing sewage flows.

270.04 Quality Assurance.

- A. Perform general work in accordance with NASSCO recommended specifications for sewer collection system rehabilitation.

270.05 Qualifications.

- A. Company specializing in performing the work of this section with minimum of three (3) years' experience.

270.06 Cleaning Procedures.

A. Sewer 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

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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 legally.

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. Section Removed.

F. Pumping and flow bypassing.

1. 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 02600.

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.

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3. Coordination with private property owners is required.

270.07 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.
- 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.

270.08 Payment for Pipeline Cleaning.

- A. The quantity to be paid under Item No. 9 in the Schedule of Prices is the length of pipeline cleaning operations performed per linear foot as indicated on the Plans and as specified herein. The price stated is full compensation for cleaning of the existing sewer force main, labor, tools, construction equipment and materials, and for all other work and expenses incidental thereto, complete and accepted by the Engineer.

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SECTION 02800 – TELEVISION INSPECTION

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280.00 TELEVISION INSPECTION

280.01 General.

A. Summary.

1. Requirements for television inspection of pipelines.

B. References.

1. National Association of Sewer Service Companies
2. NASSCO Recommended Specifications for Sewer Collection System Rehabilitation.

C. Related Sections

1. Section 02105 – Maintenance of Traffic
2. Section 02600 – Maintaining Existing Flow
3. Section 02700 – Pipeline Cleaning

280.02 Submittals.

- A. In accordance with Specification Section 01000, 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 TV inspection procedures and all provisions and precautions regarding the handling of existing sewage flows.

280.03 Qualifications.

- A. Company specializing in performing the work of this section with minimum five (5) years documented experience.

280.04 Products.

A. TV 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 of building sewers, unusual conditions, roots, storm sewer connections, broken pipe, presence of scale and corrosion, deposits, and other discernible features.
2. The logs shall list the upstream manhole, downstream manhole, survey direction (with/against flow), date of inspection, time of inspection, and size of pipe, material of pipe and inspector's name.

B. DVD Recordings/ Memory Sticks:

1. Color video and audio record documenting TV inspection of conditions

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subsequent to cleaning. The purpose of recording shall be to supply a visual and audio record of problem areas of the lines that may be replayed.

2. At the beginning of each recording, it shall list the upstream manhole, downstream manhole, survey direction (with/against flow), date of inspection, time of inspection, size of pipe, material of pipe and inspector's name.
3. Video recording playback shall be at the same speed that it was recorded. Slow motion or stop- motion playback features may be supplied at the option of the Contractor.
4. Title to the tape shall remain with the Contractor; however, the Owner reserves the right to purchase any additional DVDs at the completion of the project.
5. Provide two (2) sets of DVDs/ Memory Sticks complete with TV logs in the required format.

280.05 Execution.

A. Preparation.

1. Control traffic in accordance with Specification Section 02105.
2. Bypass sewage flow to allow performance of work. Handling existing sewage flows and bypass pumping shall be as specified in Specification Section 02600.
3. Clean sewer lines in accordance with Specification Section 02700.

B. TV Inspection.

1. TV inspect sewer pipes following initial cleaning and following rehabilitation work prior to putting the line back in service.
2. After cleaning, the sewer pipes shall be visually inspected by means of color closed- circuit television. The inspection shall be recorded on DVD and printed TV inspection logs.

C. Equipment.

1. Television Camera to be specifically designed and constructed for such inspection; equipped with a light to allow a clear picture of the entire periphery of the pipe; operative in 100 percent humidity conditions; and equipped with manual or power winch, TV cable, powered rewinds or other devices that do not obstruct the camera view to move the camera through the line.
2. Camera shall be moved through the line in either direction at a moderate rate, stopping when necessary to permit proper documentation of the

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sewer's condition. In no case will the television camera be pulled at a speed greater than 30 feet per minute. At areas of interest, the camera shall be capable of rotating its lens 360- degrees to obtain a clearer, more direct viewing angle. The camera must be capable of rotating to view up into all laterals for inspection recording purposes post lining. Manual winches, power winches, TV cable, and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions shall be used to move the camera through the sewer line.

3. Camera, television monitor, recording device and all other components of the video system shall be capable of producing picture quality acceptable to the Engineer.
4. TV inspection equipment shall be equipped with a meter device to locate defects by measurement. Marking on the cable, or the like, which would require interpolation for depth of manhole, will not be allowed. Accuracy of the distance meter shall be acceptable to the Engineer.
5. When manually operated, winches are used to pull the television camera through the line, telephones or other suitable means of communication shall be set up between the two manholes of the section being inspected to ensure good communication between members of the crew.
6. If, during the inspection operation, the television camera will not pass through the entire manhole section, set up equipment so that the inspection can be performed from the opposite manhole.

280.06 Field Quality Control.

- A. TV Inspection Records: Complete records shall be kept of TV inspection performed in each manhole section. The records shall identify the following information:
 1. Identification of the manhole section tested.
 2. Distance and location of services laterals
 3. Distance, location (footage) and description of problem including but not limited to cracks, broken pipe, hole in pipe and roots. Record on DVD and memory stick all footage inside the sewer pipe. All DVD's and necessary playback equipment shall be readily accessible for review by the Engineer during the project.

280.07 Payment for Television Inspection.

- A. The quantity to be paid under Item No. 10 in the Schedule of Prices is the length of pipeline television inspection performed per linear foot as indicated on the Plans and as specified herein. The price stated is full compensation for television inspection of the existing sewer force main, labor, tools, construction equipment and materials, and for all other work and expenses incidental thereto, complete and

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accepted by the Engineer.

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SECTION 02900 – SEDIMENT AND EROSION CONTROL

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290.00 SEDIMENT AND EROSION CONTROL

290.01 Extent of Work. Without limitation, the work of this Section shall include all labor, materials and equipment to conduct the following:

- A.** Furnishing, installing and maintaining temporary controls such as compost filter sock, silt fence, grading to control runoff, baled hay/straw, inlet and outfall protection, and other miscellaneous controls as required and/or shown on the Contract Drawings or as directed by the Engineer.
- B.** Continual maintenance of installed erosion control devices.
- C.** The installation and maintenance of additional compost filter sock, silt fence, berms, ditches, sedimentation basins, construction exits, fiber mats, catch basin filters, straw, netting, gravel, trenches, mulches, grasses, slope drains and other approved erosion control devices or methods, needed to protect any areas on or off-site in accordance with the Soil Erosion and Sediment Control Plan (SESC Plan) to be developed by the Contractor which is required by the Rhode Island Department of Environmental Management RIPDES program.
- D.** Removal and cleanup.

290.02 Standards. Material and construction methods shall conform insofar as applicable, to the requirements of the Rhode Island Standard Specifications for Road and Bridge Construction, and to the Rhode Island Sediment Erosion and Control Handbook together with all extra addenda, additions, revisions and supplemental specifications.

290.03 Quality Assurance.

- A.** The Contractor shall be an experienced installer who has at least five (5) years experience and has completed at least five (5) projects with the same material and of similar scope to that indicated for this Project with a successful installation and maintenance record of in-service performance.
- B.** The Contractor is required to demonstrate compliance to the above requirements to the satisfaction of the Owner and the Engineer.

290.04 Laws and Regulations.

- A.** Contractor shall prepare and post signs as required by RIDEM.
- B.** Compliance with RIPDES Stormwater regulations as described in Section 02950 is the sole responsibility of the Contractor.

290.05 General Erosion Control Requirements.

- A.** The Engineer has the authority to control the surface area of each material exposed by construction operations and to direct the Contractor to immediately provide permanent or temporary pollution control measures to prevent contamination of adjacent watercourses or other areas of water impoundment.

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Every effort shall be made by the Contractor to prevent erosion on the site and abutting properties.

- B. The Contractor shall limit the surface area of earth material exposed.
- C. The erosion control devices furnished and installed by the Contractor shall be maintained by the Contractor until such time as the Project is completed and the Contractor is directed to remove them from the site. The Contractor shall clean and/or repair the erosion control features if and when directed by the Engineer.
- D. The Contractor shall operate all equipment and perform all construction operations so as to minimize pollution. The Contractor shall cease any of its operations that may increase pollution during rain storms.
- E. Upon completion of the Work and to satisfaction to both the Engineer and the Owner, the Contractor shall remove and dispose the erosion control features at its own expense.

290.06 Dust Control. The Contractor shall prevent the spread of dust during the performance of the Work. Methods to be used shall conform to Section 906 Dust Control of the Rhode Island Standard Specifications for Road and Bridge Construction.

290.07 Materials.

- A. Straw Bale Dike: Bales shall be made of hay with 40 pounds minimum weight and 120 pounds maximum weight. Wood stakes shall be a minimum of one (1) inch by one (1) inch nominal size by a minimum of three (3) feet long. Baled hay shall conform to Section 206 of the Rhode Island Standard Specifications for Road and Bridge Construction, "Baled Hay Erosion Check."
- B. Silt fencing fabric shall be a woven geotextile for erosion control and shall have the following properties:

Property	Test Method	Unit	Min. Avg. Roll Value (Machine Direction)
Weight	ASTM Designation D5261	oz./yd. ²	3.2
Thickness	ASTM Designation D5199	mil	15
Grab Tensile Strength	ASTM Designation D4632	lbs.	124
Grab Tensile Elongation	ASTM Designation D4632	%	15
Puncture Resistance	ASTM Designation D4833	lbs.	65
Trapezoid Tear Strength	ASTM Designation D4533	lbs.	65
Apparent Opening Size	ASTM Designation D4751	U.S. Std. Sieve	30
Flow Rate	ASTM Designation D4491	gal./min./ft. ²	10

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1. The silt fence shall be reinforced with a polymeric mesh providing a minimum tensile strength of 140 lbs/foot.
 2. Silt fence shall be a minimum of 36 inches in width.
 3. Stakes for fencing shall be a minimum two (2) inch by two (2) inch nominal size by a minimum of four foot-six inch (4'-6") long. Filter fabric shall conform to Section 206 of the Rhode Island Specifications for Road and Bridge Construction."
 4. Filter fabric fence used for diversion of "clean" surface runoff shall be a low porosity fabric.
- C. Earth Berms and Ditches: The Contractor shall use approved on-site excavated materials for berms. It shall construct temporary and/or permanent sediment drainage basin as indicated or directed.
- D. Temporary outfall protection shall be as indicated or directed by Engineer.
- E. Other Materials: All other materials, not specifically described herein, but required for adequate erosion control, shall be as selected by the Contractor subject to the approval of the Engineer.

290.08 Catch Basin Inlet Control Devices.

- A. The Contractor shall install and maintain a silt sack sediment control device that mounts under the catch basin grate. The device shall be made of a permeable geotextile that allows runoff to pass through the device at a regular flow rate. If the catch basin has a curb inlet, the device shall be equipped with a deflector to prevent sediment from entering the catch basin via the inlet.
- B. The device shall be equipped with two (2) dump straps attached at the bottom to facilitate emptying, lifting hoops to be used for lifting the device from the basin, a restraint cord to keep the sides away from the catch basin walls and a cord of a different color to indicate when the device should be emptied.
- C. The device shall be inspected after each rain event and emptied as needed, whichever comes first. The material removed after each cleaning shall be disposed offsite at a legal disposal site.

290.09 Compost Filter Sock. The Contractor shall place compost filter sock at locations either shown on the Plans or as directed by the Engineer. Filter sock shall be 8-inch diameter and conform to the R.I. Standard Specifications.

290.10 Straw Bale Dike Installation. Bales shall be placed along diversion fences, in swales, as shown on the Contract Drawings and/or as directed by the Engineer. They shall be held in place by two (2) wooden stakes in each bale driven a minimum of 18 inches into the ground. Bales shall be inspected, maintained and/or replaced until they are no longer necessary for the purpose intended or are ordered removed by the Engineer.

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290.11 Silt Fencing.

- A. Silt Fence shall be mounted on wood stakes or posts with or without fence backing as recommended by the fabric manufacturer. The bottom six (6) inches of the fabric shall be buried by trenching.
- B. The Contractor shall inspect, maintain and/or replace silt fence throughout the Contract period and remove all such temporary features when directed. Any damaged during construction shall be replaced at no additional cost to the Owner.

290.12 Temporary Earth Berms. The Contractor shall furnish and install temporary berms, channels, ditches and piping as may be necessary to control runoff.

290.13 Outfall Protection. The Contractor shall furnish and install outfall protection as may be necessary to control runoff.

290.14 Construction Requirements.

- A. The Contractor shall construct all permanent erosion and sediment control features at the earliest practical time as outlined in the accepted schedule. Temporary erosion and sediment control measure shall be used to correct conditions that develop during construction which were unforeseen, but are needed prior to installation of permanent control features, or that are needed temporarily to control erosion or sedimentation which develops during construction activities.
- B. Where erosion is likely to be a problem, clearing and grubbing operations shall be scheduled and performed so that grading operations and permanent erosion and sediment control features can follow immediately thereafter, if conditions permit; otherwise, temporary control measures will be required between successive construction stages.
- C. Contractor shall be responsible for controlling erosion within the project area and retaining sediment on-site away from sensitive environmental resources. Any fines, construction delays, remedial actions, or incarceration resulting from the Contractor's failure to comply with these provisions shall be the responsibility of the Contractor and not the Owner.
- D. Failure by the Contractor to control erosion, pollution, and siltation shall be cause for the Owner to employ outside assistance to provide the necessary corrective measures. The cost of such assistance, including engineering costs, will be charged to the Contractor and appropriate deductions made to the Contractor's monthly progress payment request.
- E. The Contractor shall remove and properly dispose of sediment from control facilities as required by the Engineer. The Contractor shall modify and improve erosion and sedimentation control facilities and replace deteriorated hay bales and other devices as required by the Engineer.

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- F. Minimum temporary and permanent erosion and sedimentation control measures are shown on the Drawings. The Contractor shall strictly adhere to the minimum provisions shown. Additionally, temporary measures shall be selected and constructed by the Contractor in consultation with the Engineer to accommodate changing field conditions that develop during construction.
- G. The temporary sedimentation basins shall be maintained from the start of construction until construction of the permanent detention basins and/or stormwater system is completed and perimeter areas are stabilized. A temporary outlet shall be constructed above the expected sediment levels. Construction of the basins shall be sequenced so that the temporary outlet is installed and basin embankment is constructed with the material available from the initial site excavations.
- H. All disturbed areas shall be re-vegetated by loaming and seeding unless otherwise noted on the approved plan.
- I. Per RIPDES requirements, in disturbed areas where construction has permanently or temporarily ceased, the area must be stabilized within 14 days. If earth disturbing activities will resume within 21 days, temporary stabilization is not required.

290.15 Inspection and Maintenance.

- A. The Contractor is responsible to maintain the sediment and erosion control features at all times throughout the project duration and until the completion certification and approval have been issued.
- B. Regular sediment and erosion control system inspections shall be conducted by the Contractor throughout the Project duration. At a minimum, weekly inspections shall be conducted. The Contractor shall report the results of the inspection and the recommended maintenance and/or repair procedures to the Engineer for approval.
- C. Additional inspections may be required and/or directed prior to or immediately following a storm event.
- D. At a minimum, maintenance shall include, but not be limited to, the following:
 - 1. Repair and/or replacement of straw bale dikes which are not properly secured, embedded, aligned or that are otherwise no longer providing their intended function to the satisfaction of the Engineer.
 - 2. Sediment build-up shall be removed from silt fences before it exceeds six (6) inches in depth.
 - 3. The Contractor shall repair and/or replacement of silt fence that is not properly secured, embedded, aligned or otherwise no longer providing its intended function to the satisfaction of the Engineer.

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290.16 Removal and Cleanup. The Contractor shall remove and dispose of all sediment and erosion control features upon receiving project completion approval from the Engineer and the Owner. The removal and cleanup shall be performed to the satisfaction of the Engineer and the Owner, and the cost shall be paid by the Contractor.

290.17 Payment for Silt Sack Sediment Traps and Compost Filter Sock.

- A. Payment for Silt Sack Sediment Trap.** The quantity to be paid for under Item 20 in the Schedule of Prices shall be the quantity of silt sack sediment trap actually placed on the site, measured in place by the Engineer. The price so stated shall constitute complete and full payment for providing all material, labor, tools and equipment to properly place the silt sack sediment traps in place, maintaining and replacing as required and subsequently removing the silt sack sediment traps when the project is complete but not before so ordered by the Engineer.
- B. Payment for Compost Filter Sock.** The quantity to be paid for under Item 19 in the Schedule of Prices shall be the number of linear feet of filter sock actually placed on the site, measured in place by the Engineer. The price so stated shall constitute complete and full payment for providing all material, labor, tools and equipment to properly place the compost filter sock securely in place, maintaining and replacing as required and subsequently removing the filter sock when the project is complete but not before so ordered by the Engineer.

END OF SECTION