



Providence Redevelopment Agency

Jorge O. Elorza, Mayor | Bonnie Nickerson AICP, Executive Director

**CITY OF PROVIDENCE
PROVIDENCE REDEVELOPMENT AGENCY**

REQUEST FOR PROPOSALS:

**FOR CONSTRUCTION SERVICES RELATED TO THE
CHARLOTTE HOPE PLAZA PROJECT
LOCATED AT 50 SIMS AVENUE**

PROVIDENCE REDEVELOPMENT AGENCY

444 Westminster Street Providence, Rhode Island 02903

401 680 8400 OFFICE | 401 680 8492 FAX

www.providenceri.gov



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The Providence Redevelopment Agency (“Agency”) in an effort to develop a portion of the former Umicore Thin-Film Technologies site located at 50 Sims Avenue in the Woonasquatucket River Corridor in the City of Providence invites proposals from qualified construction firms for construction services related to the Charlotte Hope Plaza Project (“Project”). All proposals shall include the required information enumerated in this information package, however, no proposals will be accepted unless they are developed in accordance with the Agency’s funding requirements, as set forth herein.

SCOPE OF WORK: The Project involves the construction of three connected parking areas in support of the renovation and repurposing of an abandoned industrial building located at 50 Sims Avenue in Providence, Rhode Island. The parking areas are located adjacent to the site at 460 Kinsley Avenue and 23 Charlotte Hope Street. The subject parcels are owned by the Providence Redevelopment Agency (PRA) and are located on Assessor’s Plat 027, Lots 285, 286 and 293. The project is located on one of the six brownfield sites along the Woonasquatucket Corridor that are highlighted by The Woonasquatucket Vision Plan. The PRA is proposing to make parking and access improvements in support of the site’s redevelopment. Specifically, the project consists of the following: a primary 0.7± acre parking area to accommodate 98 parked vehicles, including 4 ADA compliant spaces; a secondary 0.16± acre parking area to accommodate 18 parked vehicles, including 1 ADA compliant space; a third 0.4± acre parking area within the abandoned Watson Street to accommodate 48 parked vehicles, including 1 ADA compliant space; associated landscaping and pedestrian accommodations; temporary soil erosion and sedimentation control measures during construction; onsite low-impact stormwater treatment. The Project will serve an approximately 3.54-acre former industrial site to be redeveloped for food/beverage production, co-working, fabrication, and/or light commercial uses.

Proposals shall be submitted in writing and be to the Providence Redevelopment Agency, 444 Westminster Street, Suite 3A, Providence, Rhode Island, 02903, to the attention of Bonnie Nickerson, Executive Director, by 12:00pm on Friday, August 28, 2020. No consideration will be given to proposals submitted after this date and time. The Agency takes no responsibility for packages sent by mail or other means that cannot meet the deadline. Hand delivery is acceptable. The Agency may request additional documentation to assist in making its selection.

Proposed Schedule

- July 27, 2020 Request for Proposals issued
- August 5, 2020 Deadline for Submitting Questions & Comments
(Submitted to Colleen Dupre, cdupre@providenceri.gov)
- August 12, 2020 Pre-bid conference at 1:00p.m.
On-Site – 50 Sims Avenue, Providence, RI 02909
- August 28, 2020 Deadline for Submission of Bid/Proposal
- August 31, 2020 Bid/Proposal Awarded

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BIDDING INSTRUCTIONS

1. The Agency will select the successful bidder based on the **responsive bidder with the lowest responsible bid**, inter alia, on the following criteria: (i) cost of work to be performed; (ii) bidder qualifications and experience; (iii) time to complete work; (iv) claims history for construction work; and (v) completed bid package.
2. No proposal will be accepted if made in collusion with any other bidder.
3. A bidder who is an out-of-state corporation shall qualify or register to transact business in this State, in accordance with R.I. General Laws (as amended) §§ 7-1.1-99, 7-1.1-105, and 7-1.1-106, and shall also register with the Rhode Island Board of Contractors Registration.
4. The Agency reserves the right to reject any and all bid(s).
5. As the City of Providence is exempt from the payment of Federal Excise Taxes and Rhode Island Sales Tax, prices quoted are not to include these taxes.
6. In case of error in the extension of prices quoted, time and materials price will govern.
7. The contractor will not be permitted to either assign or underlet the contract, nor assign either legally or equitably any moneys hereunder, or its claim thereto without the previous written consent of the Agency.
8. Commencement and Completion Dates must be shown in your bid. Subject to the provisions of paragraph 22, substantial completion must occur no later than **November 6, 2020**, and final completion must occur no later than **December 4, 2020**.
9. Successful bidder and Agency will enter into a Contract. The terms thereof will be finalized based upon the bids received, and shall be non-negotiable except for ancillary items.
10. Appropriate certificates of insurance, as specified below, will be required from the successful bidder naming the Agency and the City of Providence as additional insureds.
11. No work shall commence without a prior written authorization from PRA to proceed.
12. Before submitting any Bid, each Bidder shall have examined the site for the proposed work and shall have observed its conditions.
13. Please submit one original physical copy and electronic copy of your bid to the Agency.

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14. Bids must meet the attached specifications. Any exceptions or modifications must be noted and fully explained.
15. Bidder's responses must be in ink or typewritten, and all blanks on the bid form should be completed.
16. The price or prices proposed, including unit prices and allowances, where applicable, shall be stated both in WRITING and in FIGURES, and any proposal not so stated may be rejected.
17. Bids SHOULD BE TOTALED. Do not group items: price each item individually. Awards will be made on the basis of *total* bid.
18. Each bidder is required to state in his proposal the bidding firm's name and business location; and must state the names of all persons or firms with whom the bidder is submitting a joint bid. All bids SHOULD BE SIGNED IN INK.
19. The Agency will not accept a bid without a bid bond with surety in the amount of **five per centum (5%)** of the proposed total bid price and will require the successful bidder to obtain a performance bond with surety in the amount of **one hundred per centum (100%)** of the proposed total bid price, both to be deposited with the Agency as a guarantee that the contract will be signed, delivered, and performed in full by the bidder; and in default thereof, the amount of both the bid bond and the performance bond shall be retained for the use of the Agency as liquidated damages on account of each such default. A minimum requirement for acceptability of surety shall be that the surety company chosen by the bidder is currently listed on U.S. Department of the Treasury Circular #570 as holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as hold a Surety License in the State of Rhode Island. An appropriate Certificate of Corporate Authority shall accompany the required bid bond and performance bond.
20. It is hereby mutually understood and agreed that no payment for extra work shall or will be claimed or made unless ordered in writing by the Agency.
21. Bids will be received sealed and opened privately. Awards may be made to other than the low bidder in accordance with R.I. DEM Clean Water State Revolving Fund, U.S. EPA, and U.S. EDA standards and regulations. All bid prices will be considered firm, unless qualified otherwise. Requests for price increases will not be honored.
22. Failure to deliver within the time quoted or failure to meet specifications may result in the Agency's exercise of any and all available legal and/or equitable remedies. It is agreed that timely completion is subject to strikes, lockouts, accidents and Acts of God which events shall extended the period of completion for a period equal to that suffered in the strikes, lockouts, accidents, and Acts of God.

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- 23. The successful bidder shall, prior to commencing performance under the contract, attach and submit evidence that they have complied with the provisions of the Rhode Island Worker’s Compensation Act, Title 28, Chapter 29, Section 1, et seq., of the Rhode Island General Laws. If the successful bidder is exempt from compliance under the Worker’s Compensation Act, an officer of the successful bidder shall so state by way of sworn Affidavit, which shall accompany the signed contract.

- 24. The successful bidder shall, prior to commencing performance under the contract, attach and submit appropriate certificates of insurance, naming the Agency and the City of Providence as additional insureds, to include:
 - a. General Commercial Liability coverage with limits of \$1,000,000 per each occurrence and \$5,000,000 in the Aggregate (for the Project). Such coverage shall protect the Firm and any of its Subcontractors from any and all claims which may arise out of the Firm’s operations and completed operations under the Contract for which the Firm, its Subcontractors or any persons employed by them shall be liable, including but not limited to any such claims for bodily injury, death, disability, sickness, and damage or destruction to equipment, to property, or to the Work.

 - b. Workers Compensation – Statutory coverage.

 - c. Automobile Liability – owned, non-owned, and hired automobile coverage with a combined single limit of \$1,000,000.

 - d. Umbrella – with limit of \$5,000,000 over General Liability and Automobile Liability.

 - e. Property Coverage – The Contractor shall purchase and maintain during the life of this contract “All Risk” insurance coverage for their own equipment and property, with provision for Waiver of Subrogation against the Agency and the City.

The above-listed coverage must be provided on policies and on ACORD certificates from insurance companies that are financially rated A-VI or better by A.N. Best, by which the successful bidder will indemnify and hold harmless the Agency from and against all loss or damages arising from the performance under the Contract, including all claims for personal injury or damage to property sustained by third persons, or their agents, servants and/or those claimed under them, as specified above. The Firm shall provide a waiver of subrogation in favor of the Agency on a primary noncontributory basis.

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25. The successful bidder will be required to execute a contract agreement in substantially the same form as can be found in **Appendix A**. Bidders shall submit all edits, suggestions, and comments to **Appendix A** when submitting their Bid. This will allow for an expedited period of negotiation with the awarded bidder.
26. This project may be partially funded with Federal funds from the United States Department of Commerce, Economic Development Administration, the United States Environmental Protection Agency, and the R.I. DEM Clean Water State Revolving Fund Program and therefore is subject to the Federal and State laws and regulations associated with those programs.
27. The U.S. EDA Contracting Provisions for Construction Projects herein referenced and incorporated as if fully reproduced are attached hereto as **Appendix B**. Should any terms in this Request for Proposals or **Appendix A** differ and conflict with the terms found in **Appendix B**, the terms in **Appendix B** shall control. BIDS WILL NOT BE ACCEPTED WITHOUT A FULLY EXECUTED CERTIFICATE FOUND AT THE TOP OF **APPENDIX B**.
28. A cover letter must be submitted and addressed to the Agency that identifies the bidder and contains the name, title, and telephone number of the person who will be the primary contact for the bidder and to whom the Agency may direct questions regarding the bid.
29. A summary describing the bidder's firm, its business services and experience in the area of construction. Identify all subcontractors used in preparation to submit the bid responsive to this request shall also be submitted herewith. In addition, please fill out, execute, and submit with bid a copy of the Contractor's Qualification Statement attached hereto as **Appendix C**.
30. An overview of local project staff including their relevant experience and resumes, an organizational chart, including the names of the project leaders that will be working on the project; relevant experience working collaboratively with local, state and federal regulatory agencies; relevant experience working with the City of Providence, including the Department of Planning and Development, or other City departments. Relevant experience with relevant State and Federal agencies shall be submitted with the proposal.
31. A proposal in narrative form must be submitted along with the proforma/statement of the total cost for all construction services to be provided by the bidder and/or its subcontractors, including an itemized cost for each category of work to be performed, with unit prices and/or allowances, where applicable to complete the scope of services as contained in the plans and technical specifications found in **Appendix D**. Excluded items must also be identified.
32. A list of litigation, including agency or municipal departmental violations, if any, for the past five (5) years in which the bidder was involved, describing the outcome, regarding prior construction work performed by the bidder.

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33. An executed original “Lobbying Certification and Restriction Form” as required by 31 U.S.C. § 1352 as implemented at 15 CFR Part 28, attached as **Appendix E** and a statement certifying that the bidder will ensure each subcontract made in relation to the project is subject to this requirement.
34. Fully executed originals of the forms contained in **Appendix F** must accompany the bidder’s submission.
35. The successful bidder shall provide as part of the bid the contaminated and hazardous soil removal quantities. Specifically, provide the quantity of contaminated soil to be disposed of at the RI Resource Recovery Landfill in Johnston, RI and provide the quantity of hazardous soil to be disposed of at the Wayne Disposal, Inc in Belleville, MI, or similar disposal facility licensed to accept said hazardous soil and approved by the Owner.
36. **Appendix G** is hereby reserved for any future potential addenda.
37. The provisions of The Davis-Bacon Act apply by way of Paragraph (D) found in Appendix II to Part 200 as referenced in 2 CFR 200.326 entitled “Contract Provisions” as adopted by 2 CFR 1327. The most recent Wage Determination guidance is attached in **Appendix H**.
38. A **Proposed Schedule** showing commencement, Substantial Completion, and Final Completion dates must be prepared and submitted. Completion of construction should be no later than December 4, 2020. The time for construction shall be no more than 172 days.
39. A **Bid Form**, as contained in **Appendix I** must be completed and submitted with your bid package submission. Attach additional pages as necessary.
40. A copy of the General Conditions, Special Conditions, and General Contract Provisions as contained in **Appendix J** are incorporated and referenced herein to the Bidding Instructions as if fully reproduced and shall be considered fully incorporated and reproduced in **Appendix A**.

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TERMS AND REQUIREMENTS FOR BIDDING

Project Name Description: Construction services related to the Charlotte Hope Plaza Project located at 50 Sims Avenue.

Date and Time to be submitted: Friday, August 28, 2020 @ 12:00 P.M.

Bids are to be submitted by the above date to the attention of Bonnie Nickerson at the Providence Redevelopment Agency, 444 Westminster Street, Providence, R.I. 02903.

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APPENDIX A

Sample

A G R E E M E N T
CONSTRUCTION SERVICES FOR
CHARLOTTE HOPE PLAZA PROJECT
P R O V I D E N C E , R H O D E I S L A N D

THIS AGREEMENT made this _____ day of _____, 20____ and expiring
on _____, 20____, by and between _____

a corporation organized and existing under the laws of the State of Rhode Island, hereinafter called the "Contractor", and the
Department of Public Works hereinafter called the "Agency".

WITNESSETH, that the Contractor and the Agency for the considerations stated herein mutually agree as follows:

ARTICLE 1. STATEMENT OF WORK: The Contractor shall furnish all supervision, technical personnel, labor, material, machinery, tools, equipment and services, including utility and transportation services, and perform and complete in an efficient and workmanlike manner all work required for CONSTRUCTION SERVICES FOR THE CHARLOTTE HOPE PLAZA PROJECT all in strict accordance with the Contract Documents for CONSTRUCTION SERVICES FOR THE CHARLOTTE HOPE PLAZA PROJECT, including all Addenda thereto, all as prepared by the Providence Redevelopment Agency, 444 Westminster Street, Suite 3A, Providence, RI 02903.

ARTICLE 2. THE CONTRACT PRICE: The Agency will pay the Contractor for the performance of the Contract, in current funds, subject to additions and deductions as provided in the Section - Changes in the Work under General Conditions, the sum of - _____/100 - - - Dollars (\$ _____).

ARTICLE 3. CONTRACT: The executed Contract Documents shall consist of the following:

- a. This Agreement
 - b. Addenda, if any
 - c. Invitation for Bids
 - d. Instructions to Bidders w/ Supplement
 - e. Signed Copy of Bid
 - f. General Conditions
 - g. Special Conditions
 - h. Technical Specifications
 - i. Drawings
 - j. Performance and Labor and Material Payment Bond or Bonds
-

THIS AGREEMENT, together with the other documents enumerated in this Article 3, which said other documents are as fully a part of the Contract as if hereto attached or herein repeated, forms the Contract between the parties hereto. In the event that any provision in any component part of this Contract conflicts with any provision of any other component part, the provision of the component part first enumerated in this Article 3 shall govern, except as otherwise specifically stated.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in four (4) original copies on the day and year first above written.

Attest:

Contractor:

By:

(Name / Title)

Address:

Providence Redevelopment Agency:

By:

(Bonnie Nickerson, Executive Director)

CERTIFICATE

I, _____, certify that I am the _____ of the Corporation named as Contractor herein, that _____ who signed this Agreement on behalf of the Contractor, was the _____ of said corporation; that said Agreement was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Corporate

Seal

APPENDIX B

**CERTIFICATE OF CONSENT
CONSTRUCTION SERVICES FOR
CHARLOTTE HOPE PLAZA PROJECT**

P R O V I D E N C E, R H O D E I S L A N D

CERTIFICATE OF CONSENT

I, _____, certify that I am the _____ of the Corporation named as Contractor in the attached response to the request for proposals for construction services related to the Charlotte Hope Plaza Project; that I have read in full the attached U.S. EPA and RI DEM Clean Water State Revolving Fund Specifications and Contracting Provisions, as well as the EDA Contracting Provisions for Construction Projects ("Controlling Instruments"), that I have filled out all of the required forms contained within this Appendix B; and that I hereby certify on behalf of the Corporation that it consents to said Controlling Instruments and understands that said documents control over all conflicts of terms which may arise in the contractual relationship borne out of this submission.

Signature

Title



Rhode Island Department of Environmental Management
Office of Water Resources

Clean Water State Revolving Fund Program
Contract Specifications Package

A. Federal

- 1) Equal Employment Opportunity and Affirmative Action (Executive Order 11246)
 - i) OFCCP fact sheet.
 - ii) Equal Opportunity Clause and the Standard Federal Equal Employment Specifications.
 - iii) Notice of Non-Discrimination in Employment.
- 2) Non-discrimination in employment notice.
- 3) Assurance of compliance with Title VI of the Civil Rights Act of 1964 and Section 13 of the FWPCA Amendments of 1972 (EPA form 4700-1).
- 4) Affirmative steps for soliciting MBE/WBE (40 CFR 31.36(e))
- 5) Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects (Executive Order 13202)

Applicable cross-cutting Federal authorities for projects funded through SRF programs are made available at http://water.epa.gov/grants_funding/dwsrf/xcuts.cfm. Additional information is provided in the United States Environmental Protection Agency's cross-cutting handbook available at <http://www.epa.gov/owm/cwfinance/cwsrf/enhance/DocFiles/Other%20Docs/CrosscutterHandbook.pdf>.

B. State of Rhode Island

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

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

Employment Standards Administration Office of Federal Contract Compliance Programs

Fact Sheet EXECUTIVE ORDER 11246

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

BASIC PROVISIONS

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

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

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

AFFIRMATIVE ACTION REQUIREMENTS

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

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

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

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

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

ENFORCEMENT AND COMPLIANCE

Compliance Reviews

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

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

Complaint Investigations

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

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

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

Compliance Assistance

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

Enforcing Contract Compliance

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

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

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

Further Information

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

EQUAL EMPLOYMENT OPPORTUNITY AND AFFIRMATIVE ACTION

Executive Order 11246

(Excerpts from 41 CFR 60 Parts 1 and 4)

41 CFR 60-1.4 - Equal opportunity clause

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

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

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

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing

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

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

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

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

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

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

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

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

41 CFR 60-4.3 - Equal opportunity clauses

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

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

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

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

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

achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

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

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

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

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

NOTICE TO LABOR UNIONS OR OTHER ORGANIZATIONS OF WORKERS

NON-DISCRIMINATION IN EMPLOYMENT

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

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

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

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

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

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

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

(Contractor or Subcontractor)

(Date)

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

40 CFR 31.36(e)

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

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

(2) Affirmative steps shall include:

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

EXECUTIVE ORDER

PRESERVATION OF OPEN COMPETITION AND GOVERNMENT NEUTRALITY TOWARDS GOVERNMENT CONTRACTORS' LABOR RELATIONS ON FEDERAL AND FEDERALLY FUNDED CONSTRUCTION PROJECTS

By the authority vested in me as President by the Constitution and laws of the United States of America, including the Federal Property and Administrative Services Act, 40 U.S.C. 471 et seq., and in order to (1) promote and ensure open competition on Federal and federally funded or assisted construction projects; (2) maintain Government neutrality towards Government contractors' labor relations on Federal and federally funded or assisted construction projects; (3) reduce construction costs to the Federal Government and to the taxpayers; (4) expand job opportunities, especially for small and disadvantaged businesses; and (5) prevent discrimination against Government contractors or their employees based upon labor affiliation or lack thereof; thereby promoting the economical, nondiscriminatory, and efficient administration and completion of Federal and federally funded or assisted construction projects, it is hereby ordered that:

Section 1. To the extent permitted by law, any executive agency awarding any construction contract after the date of this order, or obligating funds pursuant to such a contract, shall ensure that neither the awarding Government authority nor any construction manager acting on behalf of the Government shall, in its bid specifications, project agreements, or other controlling documents:

- (a) Require or prohibit bidders, offerors, contractors, or subcontractors to enter into or adhere to agreements with one or more labor organizations, on the same or other related construction project(s); or
- (b) Otherwise discriminate against bidders, offerors, contractors, or subcontractors for becoming or refusing to become or remain signatories or otherwise to adhere to agreements with one or more labor organizations, on the same or other related construction project(s).
- (c) Nothing in this section shall prohibit contractors or subcontractors from voluntarily entering into agreements described in subsection (a).

Sec. 2. Contracts awarded before the date of this order, and subcontracts awarded pursuant to such contracts, whenever awarded, shall not be governed by this order.

Sec. 3. To the extent permitted by law, any executive agency issuing grants, providing financial assistance, or entering into cooperative agreements for construction projects, shall ensure that neither the bid specifications, project agreements, nor other controlling documents for construction contracts awarded after the date of this order by recipients of grants or financial assistance or by parties to cooperative agreements, nor those of any construction manager acting on their behalf, shall contain any of the requirements or prohibitions set forth in section 1(a) or (b) of this order.

Sec. 4. In the event that an awarding authority, a recipient of grants or financial assistance, a party to a cooperative agreement, or a construction manager acting on behalf of the foregoing, performs in a manner contrary to the provisions of sections 1 or 3 of this order, the executive agency awarding the contract, grant, or assistance shall take such action, consistent with law and regulation, as the agency determines may be appropriate.

Sec. 5. (a) The head of an executive agency may exempt a particular project, contract, subcontract, grant, or cooperative agreement from the requirements of any or all of the provisions of sections 1 and 3 of this order, if the agency head finds that special circumstances require an exemption in order to avert an imminent threat to public health or safety or to serve the national security.

(b) A finding of "special circumstances" under section 5(a) may not be based on the possibility or presence of a labor dispute concerning the use of contractors or subcontractors who are nonsignatories to, or otherwise do not adhere to, agreements with one or more labor organizations, or concerning employees on the project who are not members of or affiliated with a labor organization.

Sec. 6. (a) The term "construction contract" as used in this order means any contract for the construction, rehabilitation, alteration, conversion, extension, or repair of buildings, highways, or other improvements to real property.

(b) The term "executive agency" as used in this order shall have the same meaning it has in 5 U.S.C. 105, excluding the General Accounting Office.

(c) The term "labor organization" as used in this order shall have the same meaning it has in 42 U.S.C. 2000e(d).

Sec. 7. With respect to Federal contracts, within 60 days of the issuance of this order, the Federal Acquisition Regulatory Council shall take whatever action is required to amend the Federal Acquisition Regulation in order to implement the provisions of this order.

Sec. 8. As it relates to project agreements, Executive Order 12836 of February 1, 1993, which, among other things, revoked Executive Order 12818 of October 23, 1992, is revoked.

Sec. 9. The Presidential Memorandum of June 5, 1997, entitled "Use of Project Labor Agreements for Federal Construction Projects" (the "Memorandum"), is also revoked.

Sec. 10. The heads of executive departments and agencies shall revoke expeditiously any orders, rules, regulations, guidelines, or policies implementing or enforcing the Memorandum or Executive Order 12836 of February 1, 1993, as it relates to project agreements, to the extent consistent with law.

Sec. 11. This order is intended only to improve the internal management of the executive branch and is not intended to, nor does it, create any right to administrative or judicial review, or any right, whether substantive or procedural, enforce-able by any party against the United States, its agencies or instrumentalities, its officers or employees, or any other person.

GEORGE W. BUSH

THE WHITE HOUSE, February 17, 2001.

TITLE 37

CHAPTER 2.1 DOMESTIC STEEL

Section

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

37-2.1-1. Short title.

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

37-2.1-2. Purpose.

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

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

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

37-2.1-4. Payment.

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

37-2.1-5. Definitions.

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

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

TITLE 37

CHAPTER 12 CONTRACTORS' BONDS

Sections

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

37-12-8. Certified copies of documents.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

TITLE 37

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

Sections

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

37-12.1-1. Definition of terms.

Terms used in this chapter shall be construed as follows:

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

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

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

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

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

37-12.1-3. Deduction from retained earnings.

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

37-12.1-4. Endorsement on securities.

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

37-12.1-5. Applicability.

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

TITLE 37

CHAPTER 13 LABOR AND PAYMENT OF DEBTS BY CONTRACTORS

Sections

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) The basic hourly rate of pay; and

(2) The amount of:

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

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

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

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

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

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

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

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

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

37-13-10. Overtime compensation.

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

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

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

37-13-12. Wage records of contractors.

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

37-13-12.1. Obstruction of enforcement.

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

37-13-12.2. Subpoena powers.

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

37-13-12.3. Compelling obedience to subpoenas.

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

37-13-12.4. Penalty for violations.

Except as otherwise provided in this chapter, any employer who shall violate or fail to comply with any of the provisions of this chapter shall be guilty of a misdemeanor and shall be punished by a fine of not less than five hundred dollars (\$ 500) nor more than one thousand dollars (\$ 1,000) for each separate offense, or by imprisonment for not less than ten (10) nor more than ninety (90) days, or by both fine and imprisonment. Each day of failure to pay wages due an employee at the time specified in this chapter shall constitute a separate and distinct violation.

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

(a) Every contractor and subcontractor awarded a contract for public works as defined by this chapter shall furnish a certified copy of his or her payroll records of his or her employees employed upon the project to the director of labor and training on a monthly basis for the preceding month's work.

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

(c) Any contractor or subcontractor who fails to comply with the provisions of this section shall be deemed guilty of a misdemeanor and shall pay to the director of labor and training five hundred dollars (\$ 500) for each calendar day of noncompliance as determined by the director of labor and training. Any of those revenues shall be deposited as general revenues. Any person, firm, or corporation found to have willfully made a false or fraudulent representation in connection with reporting their certified payroll records shall be required to pay a civil penalty to the department of labor and training in an amount of no less than one thousand dollars (\$ 1,000) and not greater than three thousand dollars (\$ 3,000) per representation. For purposes of this subsection "willfully" shall mean representations that are known to be false, or representations made with deliberate ignorance or reckless disregard for their truth or falsity.

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

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

37-13-14. Contractor's bond.

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

37-13-14.1. Enforcement - Hearings.

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

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

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

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

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

awarding authority or perform any work for a period of sixty (60) months from the date of the second violation.

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

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

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

37-13-15. Review.

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

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

- (1) Any person who is required to pay wages to his or her employees or make payments to a fund on behalf of his or her employees, as provided in this chapter;
- (2) Any person who is required to be paid wages for his or her labor or on whose behalf payments are required to be paid to funds, as provided by this chapter;
- (3) The lawful collective bargaining representative of a person defined in subdivision (2) above;
- (4) A trade association of which a person defined in subdivision (1) above is a member;
- (5) A proper authority as defined in this chapter;
- (6) A contractor who submitted a bid for work to be or which has been awarded under the provisions of this chapter or a trade association of which he or her is a member, and
- (7) A labor organization which has one or more written collective bargaining agreements with one or more employers or a trade association which sets forth the hours, wages, and working conditions of a craft, mechanic, teamster, or type of worker needed to execute the work, as provided in this chapter to the extent that it would be affected by the action or the failure to act of the director of labor and training or the hearing officer.

(c) Any aggrieved person as defined herein may obtain a review of a decision of the appeals board by filing a petition in the superior court in Providence county pursuant to the provisions of the administrative procedures act, praying for review and relief and the petition shall follow the course of and be subject to the procedures for causes filed in the court.

(d) The director is hereby empowered to enforce his or her decision and/or the decision of the appeals board in the superior court for the county of Providence.

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

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

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

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

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

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

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

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

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

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

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

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

PREVAILING WAGE RATES

(Appropriate wage rate to be inserted by bidder in specifications)

For a copy of the appropriate wage rate, contact:

**R.I. Department of Labor
Division of Labor Standards
610 Manton Avenue
Providence, RI 02909**

TITLE 37

CHAPTER 14.1 MINORITY BUSINESS ENTERPRISE

Sections

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

37-14.1-1. Purpose.

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

37-14.1-2. Applicability.

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

37-14.1-3. Definitions.

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

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

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

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

37-14.1-4. Policy.

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

37-14.1-5. Discrimination prohibited.

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

37-14.1-6. Minority business enterprise participation.

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

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

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

37-14.1-8. Sanctions.

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

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

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

**REGULATIONS GOVERNING PARTICIPATION BY MINORITY BUSINESS ENTERPRISES IN STATE
FUNDED AND DIRECTED PUBLIC CONSTRUCTION PROJECTS, CONSTRUCTION CONTRACTS
AND PROCUREMENT CONTRACTS FOR GOODS AND SERVICES**

I. GENERAL

1. Purpose

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

(b) These regulations implement, in part, R. I. Gen. Laws, Chapter 37-14.1. These regulations are effective immediately and supersede all Department of Administration regulations issued previously under these authorities insofar as such regulations affect minority business enterprise matters in the State.

2. Applicability

These regulations apply to any construction project, construction contract or procurement contract for goods and services funded in whole or in part by state funds, or funds which, in accordance with federal grant or otherwise, the state expends or administers or in which the state is a signatory. Quasi-independent state agencies, such as the Rhode Island Public Buildings Authority, the Narragansett Bay Commission and the Rhode Island Port Authority, are subject to the requirements outlined under these regulations. With respect to Department of Transportation contracts, The Director of Transportation may promulgate regulations consistent with R. I. Gen. Laws Sections 37-14.1-8 and 37-14.1-9, thereby exempting Department of Transportation contracts from the requirements of these regulations.

3. Definition

The terms "building" or "work" means construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvement of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways lighthouses, buoys, jetties, breakwaters, levees, and canals; dredging, shoring, scaffolding, drilling, blasting, excavating, clearing and landscaping. Unless conducted in connection with and at the site of such a building or work as described in the foregoing sentence, the manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not a "building" or "work" within the meaning of these regulations.

"Compliance" means the conditions existing when a prime contractor has met and implemented the requirements of these regulations.

"Construction" means all types of on-site work done on a particular building or work, including, without limitation, altering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.

"Construction Project" means a contract or group of contracts for construction work that a prime contractor has agreed to perform, whether directly or through the use of subcontractors.

"Contract" means a mutually binding legal relationship or any modification thereof obligating the seller to furnish supplies or services, including construction, and the buyer to pay for them. For purposes of these regulations, a lease is a contract.

"Contractor" means one who participates, through a contract or subcontract, in any program covered by these regulations and includes lessees.

"Director" means the Director of the Department of Administration or any person whom he/she has designated to act for him/her.

"Goods" means materials or supplies of any kind provided by a vendor, his agents or employees.

"Services" means professional or non-professional activities requiring mental or physical labor to be performed by the contractor, vendor, his agents or employees.

"Minority" means a person who is a citizen or lawful permanent resident of the United States and who is:

- (a) Black (a person having origins in any of the black racial groups of Africa);
- (b) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);
- (c) Portuguese (a person of Portuguese, Brazilian or other Portuguese culture or origin, regardless of race);
- (d) Asian American (a person having origins in any of the original peoples of the Far East, South East Asia, the Indian Subcontinent, or the Pacific Islands);
- (e) American Indian and Alaskan Native (a person having origins in any of the original peoples of North America); or
- (f) Members of other groups or other individuals found to be economically and socially disadvantaged by the Small Business Administration under Section 8(a) of the Small Business Act, as amended (15 U.S.C. 637 (a)).

"Minority Business Enterprise" or "MBE" means a small business concern as defined pursuant to Section 3 of the Federal Small Business Act and implementing regulations, which is owned and controlled by one (1) or more minorities or women and which has been certified as a Minority Business Enterprise under these regulations by the Rhode Island Department of Administration. For the purposes of these regulations, an owned and controlled business means one:

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

"MBE Coordinator" means the official designated to have overall responsibility for promotion of minority business enterprises within each department and agency for each contract covered by these regulations. He or she shall be appointed not later than the time the Request for Proposal for each contract is submitted.

"Non-compliance" means the condition existing when a contractor has failed to implement the requirements of these regulations.

"Prime Contractor" means the contractor that is charged with total construction on a contract or group of contracts, portions of which are, or will be subcontracted to their parties.

"Specialty Contractor" means a contractor charged with total construction on a contract or group of contracts, portions of which will not be subcontracted to third parties.

"Vendor" means the party with which the State contracts to provide goods or services.

4. Policy

These regulations shall be construed in accordance with the policy of the State of Rhode Island that minority business enterprises (MBEs) shall have the maximum opportunity to participate in the performance of projects or provision of goods or services outlined hereunder.

5. Construction Contracts

(a) MBE Liaison Officer

The chief executive officer of each prime contractor shall designate an MBE Liaison Officer who will coordinate with the MBE Coordinator from the Department of Administration or other state department or agency responsible for monitoring the contract.

(b) Ten Percent (10%) Requirement

(i) Each Department shall structure its procedures for procuring construction contracts to attempt to achieve the result that a minimum of ten (10%) percent of the total dollar value of these procurements is made directly or indirectly from MBEs. This result shall be achieved through one of the two methods described in paragraphs 5(b) (ii) or 5 (b) (iii) below.

(ii) Prime Contractor Method. Each prime contractor shall ensure that a minimum of ten percent (10%) of the dollar value of work to be performed on a construction project will be performed by MBEs. The prime contractor must meet or exceed this requirement or demonstrate that it could not meet this requirement despite its good-faith efforts. A prime contractor that is an MBE will satisfy the ten percent (10%) requirement by ensuring that a least ten percent (10%) of the dollar volume of work performed under the contract is performed by its employees.

(iii) Construction Contracts not involving the use of prime contractors. In lieu of using the prime contractor method described in paragraph 5(b) (ii) above, a Department may meet the ten percent (10%) requirement under these regulations by ensuring that ten percent (10%) of the dollar value of construction contracts in the aggregate for each fiscal year is awarded to MBEs. MBEs may be solicited directly to accomplish this requirement.

(iv) The ten percent (10%) requirements set forth under these regulations can be satisfied concurrently with similar requirements mandated under federal law.

(v) Nothing in these regulations shall be construed to require the award of a contract to an MBE whose bid exceeds the lowest bid by five percent (5%). Nothing in these Regulations shall be construed to require the acceptance of non-conforming goods or services.

(c) Solicitation of Bids

All departments and agencies soliciting requests for proposals for construction projects identified as having subcontracting opportunities must include in the advertisements for the project the following language: "This project is subject to Chapter 37-14.1 of the Rhode Island General Laws, and regulations promulgated thereunder, which require that ten percent of the dollar value of work performed on the project be performed by minority business enterprises."

(ii) MBE Compliance Plan

A prospective prime contractor shall include in its bid on any construction project covered by these regulations, a simple statement acknowledging its obligation to meet the ten percent (10%) requirement under these regulations. After it has been identified as the apparent low bidder, the prime contractor shall, within ten (10) working days, prepare an MBE Compliance Plan and submit it to the Director or his designee for approval. The Plan shall identify by MBE name, subcontract dollar amount and type, each subcontract that the prime contractor projects will be awarded to MBEs over the period of the project.

(d) Approval or Disapproval of MBE Plan

(i) The Director or his designee will review and approve plans that reasonably ensure compliance with the ten percent (10%) requirement.

(ii) Where the prime contractor has proved that for reasons beyond the prime contractor's control, compliance with the ten percent (10%) requirement is impossible, the Director or his designee may approve a plan that ensures compliance with an MBE utilization rate of less than ten percent (10%). To prove impossibility of compliance, there shall be a hearing, which interested parties will be notified of and permitted to attend, during which the contractor shall demonstrate the following:

(1) The prime contractor is making all appropriate efforts, including those listed in paragraph 5 (e) of these regulations, to increase MBE participation in its construction project to the ten percent (10%) level.

(2) Despite the prime contractor's efforts, the prime contractor's plan represents a reasonable expectation for the participation of MBEs in state contracts given the availability of MBEs to work on the contract.

(iii) If the Director or his designee does not approve the plan the prime contractor has submitted, the prime contractor, after consulting with the Director or his designee, shall present a revised plan.

(iv) The Director may condition the approval or establishment of any adjusted requirement on any reasonable future action by the prime contractor.

(v) Each prime contract covered under these regulations shall include the following: "The contractor agrees to ensure that minority business enterprises as defined in R.I. Gen. Laws Section 37-14.1-3, shall have the maximum opportunity to participate in the performance of subcontracts performed under this agreement. The contractor will take all reasonable steps in accordance with regulations promulgated under Chapter 37-14.1 of the Rhode Island General Laws to ensure that minority business enterprises have the maximum opportunity to compete for and perform subcontracts under this agreement."

e. Compliance

(i) Each MBE coordinator will periodically conduct on-site inspections to determine compliance with the provisions of these regulations. The Division of Purchasing, the Director or the MBE Coordinator may require a prime contractor to furnish copies of purchase orders, subcontracts, cancelled checks, and other records that may indicate the number, names, dollar value of MBE subcontracts, dates, and schedule time for performance of work by an MBE subcontractor.

(ii) A prime contractor's failure to have an approved MBE Compliance Plan as required by these regulations constitutes non-compliance with these regulations.

(iii) If a prime contractor fails to meet the requirements outlined in its approved MBE Compliance Plan, it shall explain to the Director, in writing, why the requirements could not be met and why meeting the requirements was beyond the prime contractor's control.

(iv) To determine whether a prime contractor has a good faith reason for failing to meet its requirements, the Director may consider, among other factors:

(1) Whether the prime contractor attended any pre-solicitation or pre-bid meetings that were scheduled by the state contracting authority to inform MBEs of contracting or subcontracting opportunities;

(2) Whether the prime contractor advertised in general circulation, trade association, and minority focus media concerning the subcontracting opportunities;

(3) Whether the prime contractor provided written notice to a reasonable number of specific MBEs that their interest in a contract was being solicited, in sufficient time to allow the MBEs to participate effectively;

- (4) Whether the prime contractor followed up initial solicitations of interest by contacting MBEs to determine with certainty whether the MBEs were interested;
 - (5) Whether the prime contractor selected portions of work to be performed by MBEs in order to increase the likelihood of meeting MBE participation requirements (including, where appropriate, breaking down contracts into economically feasible units to facilitate MBE participation);
 - (6) Whether the prime contractor provided interested MBEs with adequate information about the plans, specifications and requirements of the contract;
 - (7) Whether the prime contractor negotiated in good faith with interested MBEs;
 - (8) Whether the prime contractor made suggestions to interested MBEs to assist them in obtaining bonding, lines of credit, or insurance required by the prime contractor;
 - (9) Whether the prime contractor effectively used the services of available minority community organizations, minority contractors' groups, local, state and Federal minority business assistance offices; and other organizations that provide assistance in the recruitment and placement of MBEs.
- (v) If the prime contractor does not make such an explanation, or if the Director determines that the prime contractor's explanation does not justify its failure to meet the requirements in its approved MBE Plan, the Director may direct the prime contractor to take appropriate remedial action. Failure to take remedial action directed by the Director is noncompliance with these regulations.
- (vi) In the event of non-compliance with these regulations, the Director may take appropriate enforcement action. Such action may include suspension of payments, termination of the contract, recovery by the state of 10% of the contract price as liquidated damages and/or denial of the right to participate in future projects for up to three (3) years.

TITLE 37

CHAPTER 16 PUBLIC WORKS ARBITRATION

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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 party 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.
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- 45-55-5. Competitive sealed bidding.
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- 45-55-6. Competitive negotiation.
- 45-55-7. Negotiations after unsuccessful competitive sealed bidding
- 45-55-8. Sole source procurement and emergency procurements.
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- 45-55-9. Small purchases.
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- 45-55-14. Staff consultants.
- 45-55-15. Severability.
- 45-55-16 Prohibition against the use of lead based paints.

45-55-1. Legislative findings.

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

45-55-2. Method of source selection.

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

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

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

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

45-55-4. Definitions.

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

(1) "Business" means any corporation, partnership, individual, sole proprietorship, joint stock company, joint venture, or any other legal entity through which business is conducted.

(2) "Change order" means a written order signed by the purchasing agent, or contractor directing or allowing the contractor to make changes which the changes clause of the contract authorizes the purchasing agent or contractor to order without the consent of the contractor or purchasing agent.

(3) "Construction" means the process of building, altering, repairing, improving, or demolishing any public structures or building, or other public improvements of any kind to any public real property. It does not include the routine maintenance or repair of existing structures, buildings, or real property performed by salaried employees of the municipality in the usual course of their job.

(4) "Contract" means all types of agreements, including grants and orders, for the purchase or disposal of supplies, services, construction, or any other item. It includes awards; contracts of a fixed-price, cost, cost-plus-a-fixed-fee, or incentive type; contracts providing for the issuance of job or task orders; leases; letter contracts, purchase orders, and construction management contracts. It also includes supplemental agreements with respect to any of the preceding. "Contract" does not include labor contracts with employees of the municipality.

(5) "Contract modification" means any written alteration in the specifications, delivery point, rate of delivery, contract period, price, quantity, or other contract provisions of any existing contract, whether accomplished by unilateral action in accordance with a contract provision, or by mutual action of the parties to the contract. It includes bilateral actions, as supplemental agreements, and unilateral actions, as change orders, administrative changes, notices of termination, and notices of the exercise of a contract option.

(6) "Contractor" means any person having a contract with a municipality.

(8) "Data" means recorded information, regardless of form or characteristic.

(8) "Designee" means a duly authorized representative of a person holding a superior position.

(9) "Employee" means an individual drawing a salary from a municipality, whether elected or not, and any nonsalaried individual performing personal services for any municipality.

(10) "May" means permissive.

(11) "Municipality" means the individual cities and towns of the state of Rhode Island.

(12) "Negotiation" means contracting by either of the methods described in §§ 45-55-6, 45-55-7, and 45-55-8.

(13) "Person" means any business, individual, organization, or group of individuals.

(14) "Procurement" means the purchasing, buying, renting, leasing, or otherwise obtaining of any supplies, services, or construction. It also includes all functions that pertain to the obtaining of any supply, service, or construction item, including description of requirements, selection and solicitation of sources, preparation and award of contract, and all phases of contract administration.

(15) "Purchasing officer" means the person designated in each municipality or quasi public agency pursuant to section 45-55-3.

(16) "Regulations" means rules and regulations adopted by the individual cities or towns, concerning the implementation of the provisions of this chapter.

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

(18) "Shall" means imperative.

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

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

45-55-5. Competitive sealed bidding.

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

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

45-55-5.1. Business exempt.

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

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

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

45-55-6. Competitive negotiation.

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

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

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

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

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

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

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

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

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

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

45-55-9. Small purchases.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

45-55-14. Staff consultants.

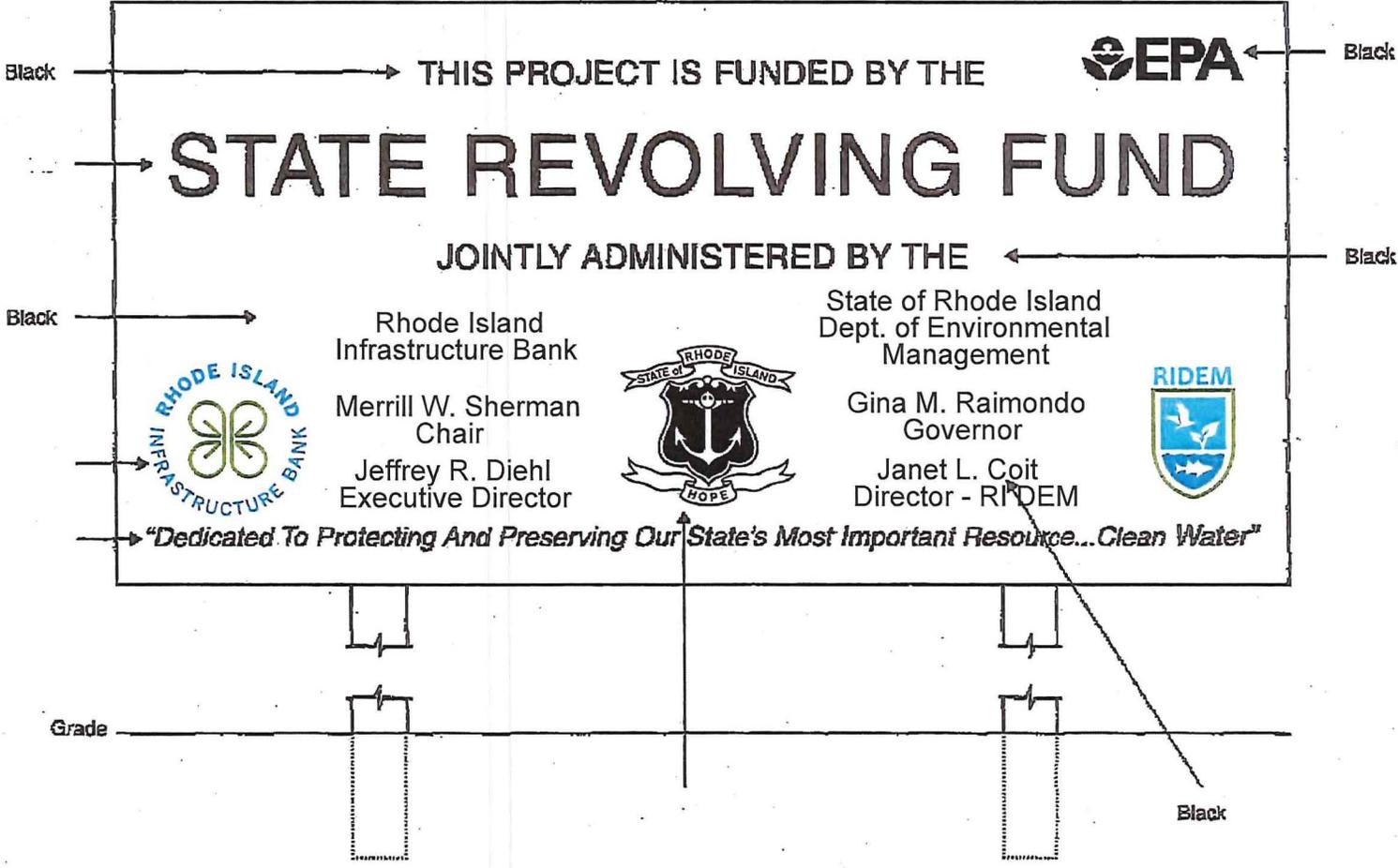
The procurement of the service of an attorney, physician or dentist by a municipality, is exempt from the provisions of this chapter.

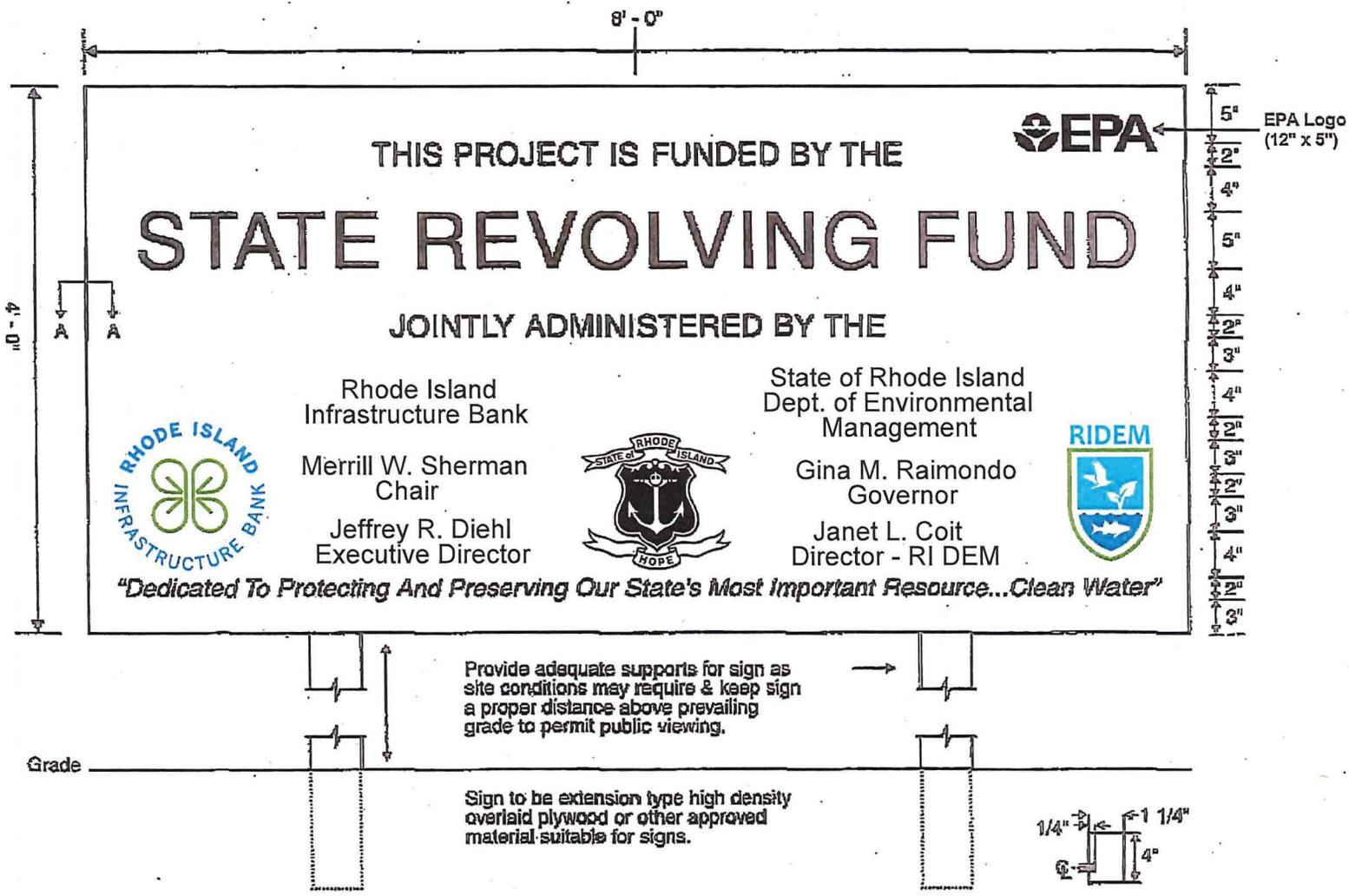
45-55-15. Severability.

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

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

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





THIS PROJECT IS FUNDED BY THE



EPA Logo
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STATE REVOLVING FUND

JOINTLY ADMINISTERED BY THE



Rhode Island
Infrastructure Bank

Merrill W. Sherman
Chair

Jeffrey R. Diehl
Executive Director



State of Rhode Island
Dept. of Environmental
Management

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Governor

Janet L. Coit
Director - RI DEM

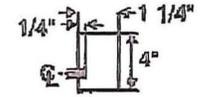


"Dedicated To Protecting And Preserving Our State's Most Important Resource...Clean Water"

Provide adequate supports for sign as site conditions may require & keep sign a proper distance above prevailing grade to permit public viewing.

Grade

Sign to be extension type high density overlaid plywood or other approved material suitable for signs.



Good Faith Efforts

What is the Purpose of the Good Faith Efforts?

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

What Are the Good Faith Efforts?

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

What are the New Contract Administration Provisions?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Prime Contractor Signature	Print Name
Title	Date

Subcontractor Signature	Print Name
Title	Date

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

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

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

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

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

Continue on back if needed

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

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**Disadvantaged Business Enterprise (DBE) Program
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Prime Contractor Signature	Print Name
Title	Date

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DEBARMENT & SUSPENSION

Executive Order 12549--Debarment and Suspension

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Implementation in the SRF Programs

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

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

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

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

Additional References

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

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

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

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

Name and Title of Authorized Agent

Date

Signature of Authorized Agent

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

**U. S. DEPARTMENT OF COMMERCE
ECONOMIC DEVELOPMENT ADMINISTRATION**



**EDA CONTRACTING PROVISIONS
FOR CONSTRUCTION PROJECTS**

These EDA Contracting Provisions for Construction Projects (EDA Contracting Provisions) are intended for use by recipients receiving federal assistance from the U. S. Department of Commerce - Economic Development Administration (EDA). They contain provisions specific to EDA and other federal provisions not normally found in non-federal contract documents. The requirements contained herein must be incorporated into all construction contracts and subcontracts funded wholly or in part with federal assistance from EDA.

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1. **DEFINITIONS**

Agreement – The written instrument that is evidence of the agreement between the Owner and the Contractor overseeing the Work.

Architect/Engineer - The person or other entity engaged by the Recipient to perform architectural, engineering, design, and other services related to the work as provided for in the contract.

Contract – The entire and integrated written agreement between the Owner and the Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

Contract Documents – Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents.

Contractor – The individual or entity with whom the Owner has entered into the Agreement.

Drawings or Plans – That part of the Contract Documents prepared or approved by the Architect/Engineer that graphically shows the scope, extent, and character of the Work to be performed by the Contractor.

EDA - The United States of America acting through the Economic Development Administration of the U.S. Department of Commerce or any other person designated to act on its behalf. EDA has agreed to provide financial assistance to the Owner, which includes assistance in financing the Work to be performed under this Contract. Notwithstanding EDA's role, nothing in this Contract shall be construed to create any contractual relationship between the Contractor and EDA.

Owner – The individual or entity with whom the Contractor has entered into the Agreement and for whom the Work is to be performed.

Project – The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

Recipient – A non-Federal entity receiving a Federal financial assistance award directly from EDA to carry out an activity under an EDA program, including any EDA-approved successor to the entity.

Specifications – That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

Subcontractor – An individual or entity having direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

Work – The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

2. **APPLICABILITY**

The Project to which the construction work covered by this Contract pertains is being assisted by the United States of America through federal assistance provided by the U.S. Department of Commerce - Economic Development Administration (EDA). Neither EDA, nor any of its departments, entities, or employees is a party to this Contract. The following EDA Contracting Provisions are included in this Contract and all subcontracts or related instruments pursuant to the provisions applicable to such federal assistance from EDA.

3. **FEDERALLY REQUIRED CONTRACT PROVISIONS**

(a) All contracts in excess of the simplified acquisition threshold - currently fixed at \$150,000 (*see* 41 U.S.C. §§ 134 and 1908) must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate.

(b) All contracts in excess of \$10,000 must address termination for cause and for convenience by the Recipient including the manner by which it will be effected and the basis for settlement.

(c) All construction contracts awarded in excess of \$10,000 by recipients of federal assistance and their contractors or subcontractors shall contain a provision requiring compliance with Executive Order 11246 of September 24, 1965, *Equal Employment Opportunity*, as amended by Executive Order 11375 of October 13, 1967, and Department of Labor implementing regulations at 41 C.F.R. part 60.

(d) All prime construction contracts in excess of \$2,000 awarded by Recipients must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. §§ 3141-3148) as supplemented by Department of Labor regulations at 29 C.F.R. part 5. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. § 874 and 40 U.S.C. § 3145) as supplemented by Department of Labor regulations at 29 C.F.R. part 3.

(e) All contracts awarded by the Recipient in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704 (the Contract Work Hours and Safety Standards Act) as supplemented by Department of Labor regulations at 29 C.F.R. part 5.

(f) All contracts must include EDA requirements and regulations that involve a requirement on the contractor or sub-contractor to report information to EDA, the Recipient or any other federal agency.

- (g) All contracts must include EDA requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract.
- (h) All contracts must include EDA requirements and regulations pertaining to copyrights and rights in data.
- (i) All contracts and subgrants in excess of \$150,000 must contain a provision that requires compliance with all applicable standards, orders, or requirements issued under the Clean Air Act (42 U.S.C. § 7401 *et seq.*) and the Federal Water Pollution Control Act (Clean Water Act) (33 U.S.C. § 1251 *et seq.*), and Executive Order 11738, *Providing for Administration of the Clean Air Act and the Federal Water Pollution Control Act With Respect to Federal Contracts, Grants, or Loans*.
- (j) Contracts must contain mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. § 6201).
- (k) Contracts must contain a provision ensuring that contracts are not to be made to parties on the government wide Excluded Parties List System in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 C.F.R. part 180.
- (l) Contracts must contain a provision ensure compliance with the Byrd Anti-Lobbying Amendment (31 U.S.C. § 1352) under which contractors that apply or bid for an award of \$100,000 or more must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. § 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.
- (m) If the Recipient is a state agency or agency of a political subdivision of a state, any contract awarded must contain a provision ensuring compliance with section 6002 of the Solid Waste Disposal Act (42 U.S.C. § 6962), as amended by the Resource Conservation and Recovery Act related to the procurement of recovered materials.

4. **REQUIRED PROVISIONS DEEMED INSERTED**

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion of correction.

5. **INSPECTION BY EDA REPRESENTATIVES**

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

6. **EXAMINATION AND RETENTION OF CONTRACTOR'S RECORDS**

(a) The Owner, EDA, or the Comptroller General of the United States, or any of their duly authorized representatives shall, generally until three years after final payment under this contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this contract for the purpose of making audit, examination, excerpts, and transcriptions.

(b) The Contractor agrees to include in first-tier subcontracts under this contract a clause substantially the same as paragraph (a) above. "Subcontract," as used in this clause, excludes purchase orders that do not exceed \$10,000.

(c) The periods of access and examination in paragraphs (a) and (b) above for records relating to (1) appeals under the disputes clause of this contract, (2) litigation or settlement of claims arising from the performance of this contract, or (3) costs and expenses of this contract to which the Owner, EDA, or Comptroller General or any of their duly authorized representatives has taken exception shall continue until disposition of such appeals, litigation, claims, or exceptions.

7. **CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES**

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in a form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due to the Contractor in accordance with the progress schedule. The Contractor also shall furnish the Owner (a) a detailed estimate giving a complete breakdown of the contract price and (b) periodic itemized estimates of work done for the purpose of making partial payments thereon. The costs employed in making up any of these schedules will be used only to determine the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the contract price.

8. **CONTRACTOR'S TITLE TO MATERIAL**

No materials, supplies, or equipment for the work shall be purchased by the Contractor or by any subcontractor that is subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants and guarantees that he/she has good title to all work, materials, and equipment used by him/her in the Work, free and clear of all liens, claims, or encumbrances.

9. **INSPECTION AND TESTING OF MATERIALS**

All materials and equipment used in the completion of the Work shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. Materials of construction, particularly those upon which the strength and durability of any structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for intended uses.

10. **"OR EQUAL" CLAUSE**

Whenever a material, article, or piece of equipment is identified in the Contract Documents by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard. Any material, article, or equipment of other manufacturers and vendors that will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed is, in the opinion of the Architect/Engineer, of equal substance and function. However, such substitution material, article, or equipment shall not be purchased or installed by the Contractor without the Architect/Engineer's written approval.

11. **PATENT FEES AND ROYALTIES**

(a) Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device that is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Architect/Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by the Owner in the Contract Documents.

(b) To the fullest extent permitted by Laws and Regulations, the Contractor shall indemnify and hold harmless the Owner and the Architect/Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

12. **CLAIMS FOR EXTRA COSTS**

No claims for extra work or cost shall be allowed unless the same was done in pursuance of a written order from the Architect/Engineer approved by the Owner.

13. CONTRACTORS AND SUBCONTRACTORS INSURANCE

(a) The Contractor shall not commence work under this Contract until the Contractor has obtained all insurance reasonably required by the Owner, nor shall the Contractor allow any subcontractor to commence work on his/her subcontract until the insurance required of the subcontractor has been so obtained and approved.

(b) Types of insurance normally required are:

- (1) Workmen's Compensation
- (2) Contractor's Public Liability and Property Damage
- (3) Contractor's Vehicle Liability
- (4) Subcontractors' Public Liability, Property Damage and Vehicle Liability
- (5) Builder's Risk (Fire and Extended Coverage)

(c) **Scope of Insurance and Special Hazards:** The insurance obtained, which is described above, shall provide adequate protection for the Contractor and his/her subcontractors, respectively, against damage claims that may arise from operations under this contract, whether such operations be by the insured or by anyone directly or indirectly employed by him/her and also against any of the special hazards that may be encountered in the performance of this Contract.

(d) **Proof of Carriage of Insurance:** The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates, and dates of expiration of applicable insurance policies.

14. CONTRACT SECURITY BONDS

(a) If the amount of this Contract exceeds \$150,000, the Contractor shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the Contract price as security for the faithful performance of this Contract and also a payment bond in an amount equal to one hundred percent (100%) of the Contract price or in a penal sum not less than that prescribed by State, Territorial, or local law, as security for the payment of all persons performing labor on the Work under this Contract and furnishing materials in connection with this Contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law. Before final acceptance, each bond must be approved by EDA. If the amount of this Contract does not exceed \$150,000, the Owner shall specify the amount of the payment and performance bonds.

(b) All bonds shall be in the form prescribed by the Contract Documents except as otherwise provided in applicable laws or regulations, and shall be executed by such sureties as are named in the current list of *Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies* as published in Treasury Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's

authority to act. Surety companies executing the bonds must also be authorized to transact business in the state where the Work is located.

15. **LABOR STANDARDS - DAVIS-BACON AND RELATED ACTS**
(as required by section 602 of PWEDA)

(a) **Minimum Wages**

(1) All laborers and mechanics employed or working upon the site of the Work in the construction or development of the Project 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 at 29 C.F.R. part 3, the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at the 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 that 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 29 C.F.R. § 5.5(a)(1)(iv); 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 29 C.F.R. § 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 determined under 29 C.F.R. § 5.5(a)(1)(ii) 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.

(2) (i) Any class of laborers or mechanics to be employed under the Contract, but not listed in the wage determination, shall be classified in conformance with the wage determination. EDA shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

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

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

(C) The proposed wage rate, including any bona fide fringe benefits, bears a

reasonable relationship to the wage rates contained in the wage determination.

(ii) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and EDA or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by EDA or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210.

(iii) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and EDA or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), EDA or its designee shall refer the questions, including the views of all interested parties and the recommendation of EDA or its designee, to the Administrator for determination.

(iv) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(2)(ii) or (iii) 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.

(3) 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.

(4) 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.

(b) **Withholding**

EDA or its designee shall upon its own action or upon written request of 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 in the construction or development of the Project, all or part of the wages required by the Contract, EDA or its designee 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. EDA or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

(c) **Payrolls and basic records**

(1) 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 in the construction or development of the Project. 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 C.F.R. § 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, the plan or program is financially responsible, and the plan or program has been communicated in writing to the laborers or mechanics affected, and provide records that 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.

(2) (i) For each week in which Contract work is performed, the Contractor shall submit a copy of all payrolls to the Owner for transmission to EDA or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 C.F.R. part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose. It may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402; or downloaded from the U.S. Department of Labor's website at <https://www.dol.gov/whd/forms/wh347.pdf>. The prime Contractor is responsible for the submission of copies of payrolls by all subcontractors

(ii) 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:

(A) That the payroll for the payroll period contains the information required to be maintained under 29 C.F.R. § 5.5(a)(3)(i) and that such information is correct and complete;

(B) 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 29 C.F.R. part 3; and

(C) 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.

(iii) 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 15(c)(2)(ii) of this section.

(iv) 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 3729 of Title 31 of the U.S. Code.

(3) The Contractor or subcontractor shall make the records required under paragraph 15(c)(1) of this section available for inspection, copying, or transcription by authorized representatives of EDA or its designee 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, EDA or its designee may, after written notice to the Contractor 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 C.F.R. § 5.12.

(d) **Apprentices and Trainees.**

(1) **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, Bureau of Apprenticeship and Training (Bureau), or with a State Apprenticeship Agency recognized by the Bureau, 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 Bureau of Apprenticeship and Training 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 Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, 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.

(2) **Trainees.** Except as provided in 29 C.F.R. § 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 that 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's 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.

(3) **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, *Equal Employment Opportunity*, as amended, and 29 C.F.R. part 30.

(e) **Compliance with Copeland Anti-Kickback Act Requirements.** The Contractor shall comply with the Copeland Anti-Kickback Act (18 U.S.C. § 874 and 40 U.S.C. § 3145) as supplemented by Department of Labor regulations (29 C.F.R. part 3, “Contractors and Subcontractors on Public Buildings or Public Works Financed in Whole or in Part by Loans or Grants of the United States”). The Act provides that the Contractor and any subcontractors shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which they are otherwise entitled. The Owner shall report all suspected or reported violations to EDA.

(f) **Subcontracts.** The Contractor and any subcontractors will insert in any subcontracts the clauses contained in 29 C.F.R. §§ 5.5(a)(1) through (10) and such other clauses as EDA or its designee may 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 C.F.R. § 5.5.

(g) **Contract termination; debarment.** The breach of the contract clauses in 29 C.F.R. § 5.5 may be grounds for termination of the contract, and for debarment as a Contractor and a subcontractor as provided in 29 C.F.R. § 5.12.

(h) **Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 C.F.R. parts 1, 3, and 5 are herein incorporated by reference in this contract.

(i) **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 C.F.R. parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and EDA or its designee, the U.S. Department of Labor, or the employees or their representatives.

(j) **Certification of Eligibility.**

(1) By entering into this Contract, the Contractor certifies that neither it nor any person or firm that 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 C.F.R. § 5.12(a)(1).

(2) 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 C.F.R. § 5.12(a)(1).

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

16. **LABOR STANDARDS - CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

As used in this paragraph, the terms “laborers” and “mechanics” include watchmen and guards.

(a) **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 that person 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.

(b) **Violation; liability for unpaid wages, liquidated damages.** In the event of any violation of the clause set forth in paragraph (a) of this section, the Contractor and any subcontractor responsible therefore 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 (a) 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 (a) of this section.

(c) **Withholding for unpaid wages and liquidated damages.** EDA or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies 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) of this section.

(d) **Subcontracts.** The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (a) through (c) 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 (a) through (c) of this section.

17. **EQUAL EMPLOYMENT OPPORTUNITY**

(a) The Recipient 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 C.F.R. chapter 60, which is paid for in whole or in part with funds obtained from EDA, the following equal opportunity clause:

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

Economic Development Administration
Contracting Provisions for Construction Projects

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, 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 consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The Contractor will send to each labor union or representative of workers with which it 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 hereunder, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965 and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by EDA and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of

this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally-assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.

(8) The Contractor will include the portion of the sentence immediately preceding paragraph 17(a)(1) and the provisions of paragraphs 17(a)(1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as EDA or the Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event the Contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by EDA or the Secretary of Labor, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

(9) The Recipient 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, however, that if the Recipient 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 that does not participate in work on or under the Contract.

(10) The Recipient agrees that it will assist and cooperate actively with EDA 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 EDA and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist EDA in the discharge of the EDA's primary responsibility for securing compliance.

(11) The Recipient 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 EDA or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the Recipient agrees that if it fails or refuses to comply with these undertakings, EDA may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this EDA financial assistance; 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.

(b) Exemptions to Above Equal Opportunity Clause (41 C.F.R. chapter 60):

(1) Contracts and subcontracts not exceeding \$10,000 (other than Government bills of lading, and other than contracts and subcontracts with depositories of Federal funds in any amount and with financial institutions which are issuing and paying agents for U.S. savings bonds and savings notes) are exempt. The amount of the Contract, rather than the amount of the federal financial assistance, shall govern in determining the applicability of this exemption.

(2) Except in the case of subcontractors for the performance of construction work at the site of construction, the clause shall not be required to be inserted in subcontracts below the second tier.

(3) Contracts and subcontracts not exceeding \$10,000 for standard commercial supplies or raw materials are exempt.

18. **CONTRACTING WITH SMALL, MINORITY AND WOMEN'S BUSINESSES**

(a) If the Contractor intends to let any subcontracts for a portion of the work, the Contractor shall take affirmative steps to assure that small, minority and women's businesses are used when possible as sources of supplies, equipment, construction, and services.

(b) Affirmative steps shall consist of:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Ensuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises;

(4) Establishing delivery schedules, where the requirements of the contract permit, which encourage participation by small and minority businesses and women's business enterprises;

(5) Using the services and assistance of the U.S. Small Business Administration, the Minority Business Development Agency of the U.S. Department of Commerce, and State and local governmental small business agencies;

(6) Requiring each party to a subcontract to take the affirmative steps of this section; and

(7) The Contractor is encouraged to procure goods and services from labor surplus area firms.

19. **HEALTH, SAFETY, AND ACCIDENT PREVENTION**

(a) In performing this contract, the Contractor shall:

(1) Ensure that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to their health and/or safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation;

(2) Protect the lives, health, and safety of other persons;

(3) Prevent damage to property, materials, supplies, and equipment; and

(4) Avoid work interruptions.

(b) For these purposes, the Contractor shall:

(1) Comply with regulations and standards issued by the Secretary of Labor at 29 C.F.R. part 1926. Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 3701 – 3708); and

(2) Include the terms of this clause in every subcontract so that such terms will be binding on each subcontractor.

(c) The Contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this Contract resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment, and shall report this data in the manner prescribed by 29 C.F.R. part 1904.

(d) The Owner shall notify the Contractor of any noncompliance with these requirements and of the corrective action required. This notice, when delivered to the Contractor or the Contractor's representative at the site of the Work, shall be deemed sufficient notice of the noncompliance and corrective action required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to take corrective action promptly, the Owner may issue an order stopping all or part of the Work until satisfactory corrective action has been taken. The Contractor shall not base any claim or request for equitable adjustment for additional time or money on any stop order issued under these circumstances.

(e) The Contractor shall be responsible for its subcontractors' compliance with the provisions of this clause. The Contractor shall take such action with respect to any subcontract as EDA, or the Secretary of Labor shall direct as a means of enforcing such provisions.

20. **CONFLICT OF INTEREST AND OTHER PROHIBITED INTERESTS**

(a) No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept, or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the Project, shall become directly or indirectly interested personally in this Contract or in any part hereof.

(b) No officer, employee, architect, attorney, engineer, or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the Project, shall become directly or indirectly interested personally in this Contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the Project.

(c) The Contractor may not knowingly contract with a supplier or manufacturer if the individual or entity who prepared the Contract Documents has a corporate or financial affiliation with the supplier or manufacturer.

(d) The Owner's officers, employees, or agents shall not engage in the award or administration of this Contract if a conflict of interest, real or apparent, may be involved. Such a conflict may arise when: (i) the employee, officer or agent; (ii) any member of their immediate family; (iii) their partner or (iv) an organization that employs, or is about to employ, any of the above, has a financial interest in the Contractor. The Owner's officers, employees, or agents shall neither solicit nor accept gratuities, favors, or anything of monetary value from the Contractor or subcontractors.

(e) If the Owner finds after a notice and hearing that the Contractor, or any of the Contractor's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise) to any official, employee, or agent of the Owner or EDA in an attempt to secure this Contract or favorable treatment in awarding, amending, or making any determinations related to the performance of this Contract, the Owner may, by written notice to the Contractor, terminate this Contract. The Owner may also pursue other rights and remedies that the law or this Contract provides. However, the existence of the facts on which the Owner bases such findings shall be an issue and may be reviewed in proceedings under the dispute resolution provisions of this Contract.

(f) In the event this Contract is terminated as provided in paragraph (e) of this section, the Owner may pursue the same remedies against the Contractor as it could pursue in the event of a breach of this Contract by the Contractor. As a penalty, in addition to any other damages to which it may be entitled by law, the Owner may pursue exemplary damages in an amount (as determined by the Owner) which shall not be less than three nor more than ten times the costs the Contractor incurs in providing any such gratuities to any such officer or employee.

21. RESTRICTIONS ON LOBBYING

(a) This Contract, or subcontract is subject to 31 U.S.C. § 1352, regarding lobbying restrictions. The section is explained in the common rule, 15 C.F.R. part 28 (55 FR 6736-6748, February 26, 1990). Each bidder under this Contract or subcontract is generally prohibited from using federal funds for lobbying the Executive or Legislative Branches of the Federal Government in connection with this EDA Award.

(b) **Contract Clause Threshold:** This Contract Clause regarding lobbying must be included in each bid for a contract or subcontract exceeding \$100,000 of federal funds at any tier under the EDA Award.

(c) **Certification and Disclosure:** Each bidder of a contract or subcontract exceeding \$100,000 of federal funds at any tier under the federal Award must file Form CD-512, *Certification Regarding Lobbying – Lower Tier Covered Transactions*, and, if applicable, Standard Form-LLL, *Disclosure of Lobbying Activities*, regarding the use of any nonfederal funds for lobbying. Certifications shall be retained by the Contractor or subcontractor at the next higher tier. All disclosure forms, however, shall be forwarded from tier to tier until received by the Recipient of the EDA Award, who shall forward all disclosure forms to EDA.

(d) **Continuing Disclosure Requirement:** Each Contractor or subcontractor that is subject to the Certification and Disclosure provision of this Contract Clause is required to file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by such person. Disclosure forms shall be forwarded from tier to tier until received by the Recipient of the EDA Award, who shall forward all disclosure forms to EDA.

(e) **Indian Tribes, Tribal Organizations, or Other Indian Organizations:** Indian tribes, tribal organizations, or any other Indian organizations, including Alaskan Native organizations, are excluded from the above lobbying restrictions and reporting requirements, but only with respect to expenditures that are by such tribes or organizations for lobbying activities permitted by other federal law. An Indian tribe or organization that is seeking an exclusion from Certification and Disclosure requirements must provide EDA with the citation of the provision or provisions of federal law upon which it relies to conduct lobbying activities that would otherwise be subject to the prohibitions in and to the Certification and Disclosure requirements of 31 U.S.C. § 1352, preferably through an attorney's opinion. Note, also, that a non-Indian subrecipient, contractor, or subcontractor under an award to an Indian tribe, for example, is subject to the restrictions and reporting requirements.

22. HISTORICAL AND ARCHAEOLOGICAL DATA PRESERVATION

The Contractor agrees to facilitate the preservation and enhancement of structures and objects of historical, architectural or archaeological significance and when such items are found and/or unearthed during the course of project construction. Any excavation by the Contractor that uncovers an historical or archaeological artifact shall be immediately reported to the Owner and a representative of EDA. Construction shall be temporarily halted pending the notification process and further directions issued by EDA after consultation with the State Historic

Preservation Officer (SHPO) for recovery of the items. *See* the National Historic Preservation Act of 1966 (54 U.S.C. § 300101 *et seq.*, formerly at 16 U.S.C. § 470 *et seq.*) and Executive Order No. 11593 of May 31, 1971.

23. **CLEAN AIR AND WATER**

Applicable to Contracts in Excess of \$150,000

(a) **Definition.** “Facility” means any building, plant, installation, structure, mine, vessel, or other floating craft, location, or site of operations, owned, leased, or supervised by the Contractor or any subcontractor, used in the performance of the Contract or any subcontract. When a location or site of operations includes more than one building, plant, installation, or structure, the entire location or site shall be deemed a facility except when the Administrator, or a designee, of the United States Environmental Protection Agency (EPA) determines that independent facilities are collocated in one geographical area.

(b) In compliance with regulations issued by the EPA, 2 C.F.R. part 1532, pursuant to the Clean Air Act, as amended (42 U.S.C. § 7401 *et seq.*); the Federal Water Pollution Control Act, as amended (33 U.S.C. § 1251 *et seq.*); and Executive Order 11738, the Contractor agrees to:

(1) Not utilize any facility in the performance of this contract or any subcontract which is listed on the Excluded Parties List System, part of the System for Award Management (SAM), pursuant to 2 C.F.R. part 1532 for the duration of time that the facility remains on the list;

(2) Promptly notify the Owner if a facility the Contractor intends to use in the performance of this contract is on the Excluded Parties List System or the Contractor knows that it has been recommended to be placed on the List;

(3) Comply with all requirements of the Clean Air Act and the Federal Water Pollution Control Act, including the requirements of section 114 of the Clean Air Act and section 308 of the Federal Water Pollution Control Act, and all applicable clean air and clean water standards; and

(4) Include or cause to be included the provisions of this clause in every subcontract and take such action as EDA may direct as a means of enforcing such provisions.

24. **USE OF LEAD-BASED PAINTS ON RESIDENTIAL STRUCTURES**

(a) If the work under this Contract involves construction or rehabilitation of residential structures over \$5,000, the Contractor shall comply with the Lead-based Paint Poisoning Prevention Act (42 U.S.C. § 4831). The Contractor shall assure that paint or other surface coatings used in a residential property does not contain lead equal to or in excess of 1.0 milligram per square centimeter or 0.5 percent by weight or 5,000 parts per million (ppm) by weight. For purposes of this section, “residential property” means a dwelling unit, common areas, building exterior surfaces, and any surrounding land, including outbuildings, fences and play equipment affixed to the land, belonging to an owner and available for use by residents, but not

including land used for agricultural, commercial, industrial or other non-residential purposes, and not including paint on the pavement of parking lots, garages, or roadways.

- (b) As a condition to receiving assistance under PWEDA, recipients shall assure that the restriction against the use of lead-based paint is included in all contracts and subcontracts involving the use of federal funds.

25. **ENERGY EFFICIENCY**

The Contractor shall comply with all standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. § 6201) for the State in which the Work under the Contract is performed.

26. **ENVIRONMENTAL REQUIREMENTS**

When constructing a Project involving trenching and/or other related earth excavations, the Contractor shall comply with the following environmental constraints:

- (1) **Wetlands.** When disposing of excess, spoil, or other construction materials on public or private property, the Contractor shall not fill in or otherwise convert wetlands.
- (2) **Floodplains.** When disposing of excess, spoil, or other construction materials on public or private property, the Contractor shall not fill in or otherwise convert 100 year floodplain areas delineated on the latest Federal Emergency Management Agency (FEMA) Floodplain Maps, or other appropriate maps, i.e., alluvial soils on Natural Resource Conservation Service (NRCS) Soil Survey Maps.
- (3) **Endangered Species.** The Contractor shall comply with the Endangered Species Act, which provides for the protection of endangered and/or threatened species and critical habitat. Should any evidence of the presence of endangered and/or threatened species or their critical habitat be brought to the attention of the Contractor, the Contractor will immediately report this evidence to the Owner and a representative of EDA. Construction shall be temporarily halted pending the notification process and further directions issued by EDA after consultation with the U.S. Fish and Wildlife Service.

27. **DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSIONS**

As required by Executive Orders 12549 and 12689, *Debarment and Suspension*, 2 C.F.R. Part 180 and implemented by the Department of Commerce at 2 C.F.R. part 1326, for prospective participants in lower tier covered transactions (except subcontracts for goods or services under the \$25,000 small purchase threshold unless the subrecipient will have a critical influence on or substantive control over the award), the Contractor agrees that:

- (1) By entering into this Contract, the Contractor and subcontractors certify, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared Economic Development Administration Contracting Provisions for Construction Projects

ineligible, or voluntarily excluded from participation in this Contract by any federal department or agency.

(2) Where the Contractor or subcontractors are unable to certify to any of the statements in this certification, the Contractor or subcontractors shall attach an explanation to this bid.

See also 2 C.F.R. part 180 and 2 C.F.R. § 200.342.

28. **EDA PROJECT SIGN**

The Contractor shall supply, erect, and maintain in good condition a Project sign according to the specifications provided by EDA. To the extent practical, the sign should be a free standing sign. Project signs shall not be located on public highway rights-of-way. Location and height of signs will be coordinated with the local agency responsible for highway or street safety in the Project area, if any possibility exists for obstructing vehicular traffic line of sight. Whenever the EDA site sign specifications conflict with State law or local ordinances, the EDA Regional Director will permit such conflicting specifications to be modified so as to comply with State law or local ordinance.

29. **BUY AMERICA**

To the greatest extent practicable, contractors are encouraged to purchase American-made equipment and products with funding provided under EDA financial assistance awards.

EDA PROJECT SIGN

The Contractor shall supply, erect, and maintain in good condition a project sign according to the specifications set forth below:

EDA SITE SIGN SPECIFICATIONS

Size: 4' x 8' x ¾"

Materials: Exterior grade/MDO plywood (APA rating A-B)

Supports: 4" x 4" x 12' posts with 2" x 4" cross branching

Erection: Posts shall be set a minimum of three feet deep in concrete footings that are at least 12" in diameter.

Paint: Outdoor enamel

Colors: Jet Black, Blue (PMS300), and Gold (PMS7406). Specifically, on white background the following will be placed:

The U. S. Department of Commerce seal in blue, black, and gold;

“EDA” in blue;

“U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT

ADMINISTRATION” in black;

“In partnership with” in blue;

(Actual name of the) “EDA Grant Recipient” in black;

Lettering: Specific fonts are named below; positioning will be as shown on the attached illustration.

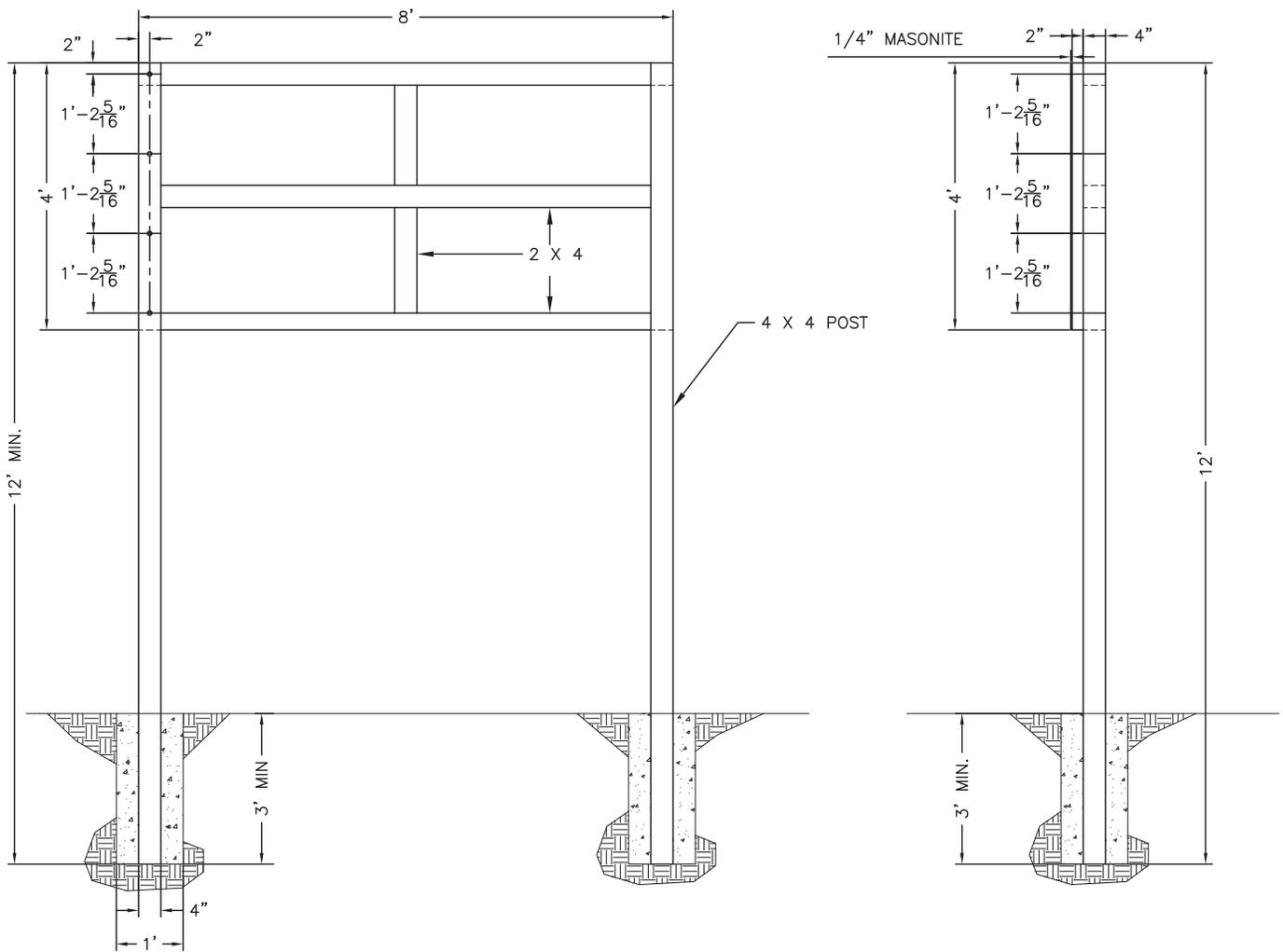
“U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT
ADMINISTRATION” use Bank Gothic Medium - **BANK GOTHIC MED**

“In partnership with” use Univers™ 55 Oblique - **Univers 55**

(Name of) “EDA Grant Recipient” use Univers™ Extra Black 85 **Univers 85**

Project signs will not be erected on public highway rights-of-way. If any possibility exists for obstruction to traffic line of sight, the location and height of the sign will be coordinated with the agency responsible for highway or street safety in the area.

The EDA Regional Director may permit modifications to these specifications if they conflict with state law or local ordinances.



SIGN A
 MASONITE SIGN
 SCALE: 3/8" = 1'

PROJECT - SIGN A

ECONOMIC DEVELOPMENT ADMINISTRATION

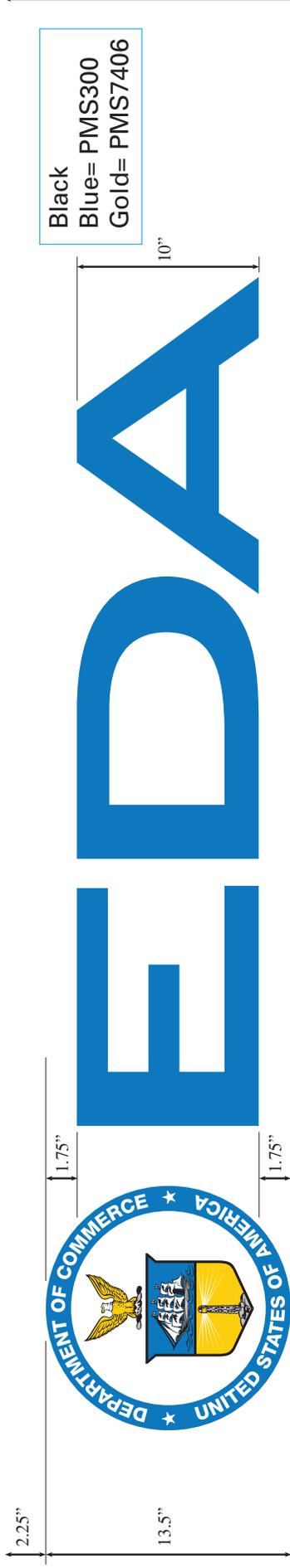


EEDA

U.S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION

In partnership with

<EDA Grant Recipient Name>

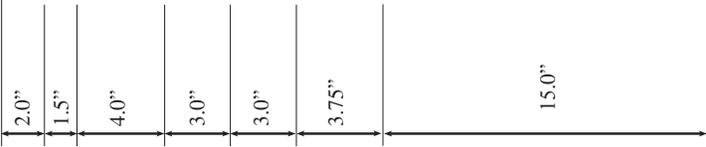


Black
 Blue= PMS300
 Gold= PMS7406

U.S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION

In partnership with

<EDA Grant Recipient Name>



48"

APPENDIX C



Providence Redevelopment Agency

Jorge O. Elorza, Mayor | Bonnie Nickerson AICP, Executive Director

CONTRACTOR’S QUALIFICATION STATEMENT

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

SUBMITTED TO:

ADDRESS:

SUBMITTED BY:

NAME:

DUNS NUMBER:

TAXPAYER/EMPLOYER ID NUMBER:

ADDRESS:

PRINCIPAL OFFICE:

Corporation

Partnership

Individual

Joint Venture

Other

1. How many years has your organization been in business as a general contractor?

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

a. Under what other or former names has your organization operated?



Providence Redevelopment Agency

Jorge O. Elorza, Mayor | Bonnie Nickerson AICP, Executive Director

3. If a corporation, answer the following:
 - a. Date of incorporation
 - b. State of incorporation
 - c. President's name
 - d. Vice-president's name(s)
 - e. Secretary's name
 - f. Treasurer's name

4. If an individual or a partnership, answer the following:
 - a. Date of organization
 - b. Name and address of all partners (state whether general or limited partnership)

5. If other than a corporation or partnership, describe organization and name principals.

6. List states and categories in which your organization is legally qualified to do business. Indicate registration or license numbers. List states in which partnership or trade name is filed.

7. We normally perform the following work with our own forces.



Providence Redevelopment Agency

Jorge O. Elorza, Mayor | Bonnie Nickerson AICP, Executive Director

8. Have you ever failed to complete any work awarded to you? If so, note when, where and why.

9. Within the last five (5) years, has any officer or partner of your organization ever been an officer or partner of another organization when it failed to complete a construction contract? If so, attach a separate sheet of explanation.

10. On a separate sheet, list major construction projects your organization has in process, giving the name of project, owner, architect, contract amount, percent complete and scheduled completion date.

11. On a separate sheet, list the major projects your organization has completed in the past five (5) years, giving the name of project, owner, architect, contract amount, date of completion and percentage of the cost of the work performed with your own forces.

12. On a separate sheet, list the construction experience of the key individuals of your organization.

13. Trade references.



Providence Redevelopment Agency

Jorge O. Elorza, Mayor | Bonnie Nickerson AICP, Executive Director

- 14. Bank references.

- 15. Name of bonding company and name and address of agent.

- 16. Attach a financial statement, audited if available, including contractor's latest balance sheet and income statement showing the following items:
 - a. Current assets (i.e. cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials inventory and prepaid expenses).
 - b. Net fixed assets.
 - c. Other assets.
 - d. Current liabilities (i.e. accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries and accrued payroll taxes).
 - e. Other liabilities (i.e. capital, capital stock, authorized and outstanding shares par values, earned surplus and retained earnings).
 - f. Name of firm preparing financial statement and date thereof.
 - g. Is this financial statement for the identical organization named on Page One (1)?
 - h. If not, explain the relationship and financial responsibility of the organization whose financial statement is provided (i.e. parent-subsidiary).
 - i. Will this organization act as guarantor of the contract for construction?



Providence Redevelopment Agency

Jorge O. Elorza, Mayor | Bonnie Nickerson AICP, Executive Director

17. Dated at _____ this _____
day of _____, 20_____.

Name of organization: _____

By

Title

18. _____ being duly sworn deposes and says that he/she is
the _____ of _____
contractor(s) and that answers to the foregoing questions and all statements therein contained
are true and correct.

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

Notary Public

My commission expires: _____

APPENDIX D

Site Plans

Issued for	Permits/Bid
Date Issued	July 24, 2020
Latest Issue	July 24, 2020

Municipal Parking Lot

50 Sims Avenue
Providence, Rhode Island



1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

Survey

Waterman Engineering Company
46 Sutton Avenue
East Providence, RI 02914

Site Lighting and Site Lighting Electric

Thompson Engineering Company, Inc.
89 Newbury Street
Danvers, MA 01923

Owner

Providence Redevelopment Agency
400 Westminster Street
Suite 6
Providence, Rhode Island 02903

Applicant

Providence Redevelopment Agency
400 Westminster Street
Suite 6
Providence, Rhode Island 02903

Assessor's Map: 027
Lot: 285, 286, 293

Sheet Index

No.	Drawing Title	Latest Issue
C-1	Legend and General Notes	July 24, 2020
C-2	Layout, Materials, and Utilities Plan	July 24, 2020
C-3	Grading and Drainage Plan	July 24, 2020
C-4	Site Details 1	July 24, 2020
C-5	Site Details 2	July 24, 2020
C-6	Site Details 3	July 24, 2020
C-7	Site Details 4	July 24, 2020
L-1	Planting Plan	July 24, 2020
L-2	Planting Details	July 24, 2020
SESC-1	Soil Erosion and Sediment Control General Notes and Details	July 24, 2020
SESC-2	Soil Erosion and Sediment Control Site Plan	July 24, 2020
SL-1	Site Photometrics Plan	TO BE ISSUED AS ADDENDUM

Reference Drawings

No.	Drawing Title	Latest Issue
SV-1	Survey Plan	TO BE ISSUED AS ADDENDUM



1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

Legend

Legend table with columns: Exist., Prop., and descriptions for various lines, symbols, and features like PROPERTY LINE, CONCRETE, UNDERDRAIN, etc.

Abbreviations

Abbreviations table with columns: General and Utility, listing codes like ABAN, ACR, ADJ, etc. and their corresponding terms like ABANDON, ACCESSIBLE CURB RAMP, ADJUST, etc.

Notes

- Notes 1-14 detailing contractor responsibilities, site security, excavation requirements, and construction standards.

Layout and Materials

- Layout and Materials notes 1-6 regarding dimensions, curbs, and proposed boundaries.

Demolition

- Demolition notes 1-4 regarding removal of existing features and site conditions.

Erosion Control

- Erosion Control note 1: SEE SESC PLANS.

Existing Conditions Information

- Existing Conditions Information notes 1-3 regarding base plan, topography, and geotechnical data.

Document Use

- Document Use notes 1-3 regarding professional service, electronic versions, and symbols/legends.

Permits

- Permits note 1 detailing required permits and approvals for construction.

Municipal Parking Lot

50 Sims Avenue
Providence, Rhode Island

Table with columns: No., Revision, Date, Appr. for tracking changes.

Designed by: Issued for: Permits/Bid
Checked by: Date: July 24, 2020

Not Approved for Construction

Legend and General Notes

Drawing Number

C-1

Sheet 1 of 7

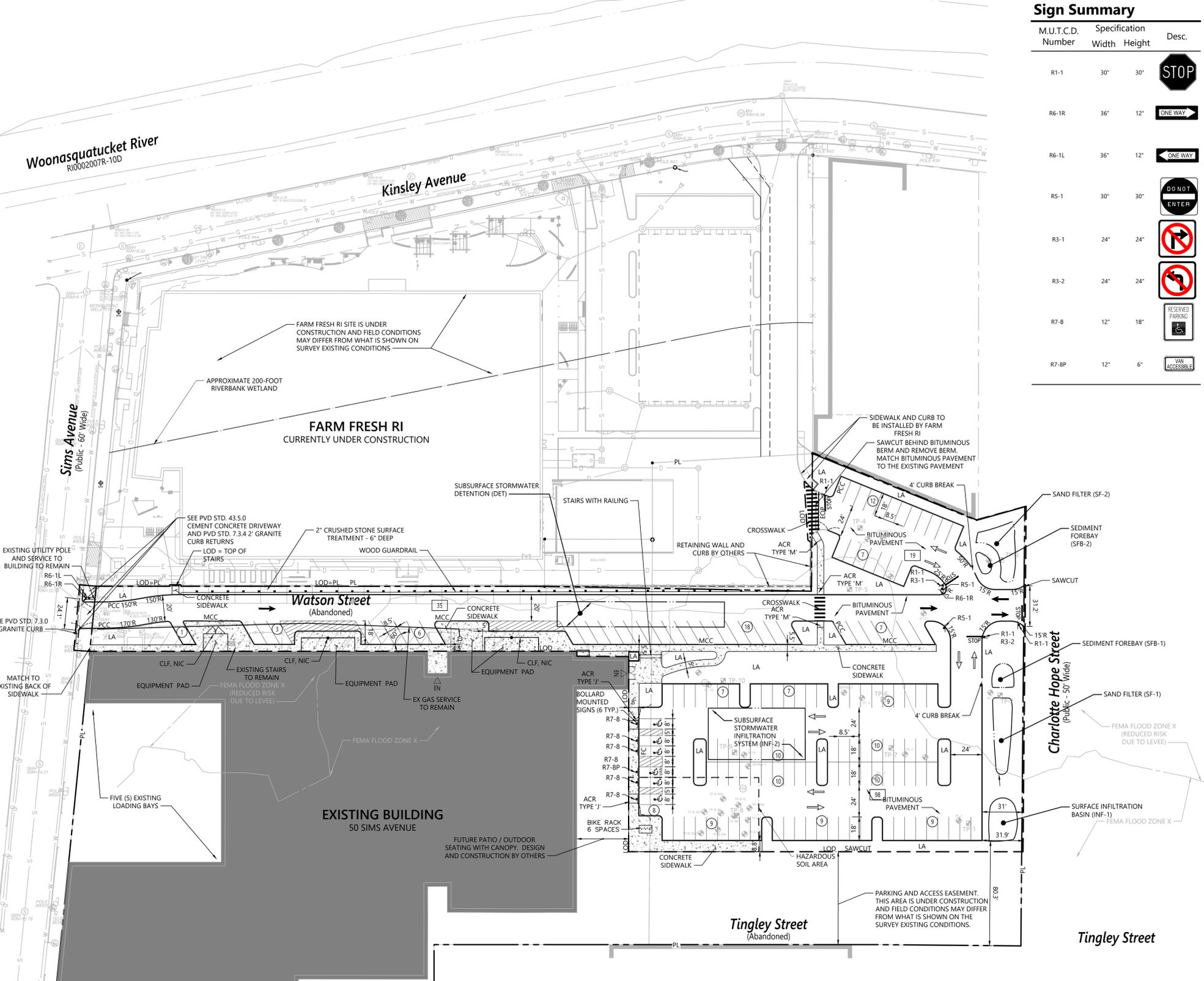
Project Number 72634.04



1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

REMEDIATION OF CONTAMINATED MATERIALS

- THE SITE HAS BEEN ASSESSED FOR VARIOUS ENVIRONMENTAL PARAMETERS. THE ENVIRONMENTAL FINDINGS INDICATE THE PRESENCE OF TOTAL PETROLEUM HYDROCARBONS (TPH), VARIOUS HEAVY METALS (PRIMARILY ARSENIC AND LEAD) AND POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) IN SOIL AT LEVELS WHICH ARE GREATER THAN APPLICABLE RIDEEM CRITERIA. THE ENTIRE SITE IS COVERED BY AN ENGINEERED BARRIER (I.E., SITE CAP) AND IS REGULATED BY THE RIDEEM OFFICE OF LAND REVITALIZATION AND SUSTAINABLE MATERIAL MANAGEMENT (LR&SMM). WORK MUST COMPLY WITH THE "CAP ALTERATION AND SOIL MANAGEMENT PLAN (SMP)" DATED JULY 17, 2020. SEVERAL KEY ELEMENTS OF THE CAP ALTERATION AND SMP ARE SPECIFIED BELOW, BUT IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE SMP AND INCORPORATE ALL REQUIREMENTS INTO THEIR SCOPE/FEE AND IMPLEMENT AS APPROPRIATE THROUGHOUT THE PROJECT.
- ALL SITE WORK INVOLVING THE DISTURBANCE, MANAGEMENT, AND DISPOSAL OF CONTAMINATED MEDIA (SOIL AND/OR GROUNDWATER) GENERATED DURING THE PROJECT AND INVOLVING THE CONSTRUCTION OF THE NEW CAP MUST BE COMPLETED BY WORKERS WITH CURRENT 40-HOUR OSHA HAZWOPER CERTIFICATION.
- AS STIPULATED IN THE CAP ALTERATION AND SOIL MANAGEMENT PLAN, AND AS SHOWN ON THE LAYOUT AND MATERIALS PLAN, THE CONTRACTOR IS TO ENCAPSULATE THE SITE VIA ONE OR MORE OF THE FOLLOWING METHODS IN ACCORDANCE WITH THE SITE DEVELOPMENT PLANS AND SPECIFICATIONS:
 - A MINIMUM OF 2 FEET OF CERTIFIED CLEAN FILL OVER EXISTING SUBGRADE
 - A GEOTEXTILE FABRIC ON TOP OF EXISTING SUBGRADE WITH A MINIMUM OF 1 FOOT OF CERTIFIED CLEAN FILL OVER THE GEOTEXTILE FABRIC (TENCATE MIRAFI 1100N, OR APPROVED EQUAL);
 - A MINIMUM OF 4-INCHES OF ASPHALT, CONCRETE PAVERS, OR CONCRETE OVER 6-INCHES OF CERTIFIED CLEAN BASE MATERIAL.
- CONTRACTOR MUST IDENTIFY SOURCE(S) OF CLEAN SOIL A MINIMUM OF 2 WEEKS PRIOR TO DESIRED DELIVERY OF CLEAN SOIL TO SITE TO PROVIDE ADEQUATE TIME FOR ENVIRONMENTAL PROFESSIONAL TO COORDINATE/SCHEDULE SOIL SAMPLING AND REVIEW OF LABORATORY RESULTS UNDER NORMAL LABORATORY TURN-AROUND TIMES (7-10 BUSINESS DAYS). CONTRACTOR IS RESPONSIBLE FOR THE COST OF LABORATORY SURCHARGES FOR TURNAROUND TIMES SHORTER THAN 7 BUSINESS DAYS, IF APPLICABLE DUE TO LACK OF ADEQUATE NOTICE (2-WEEKS MINIMUM) PROVIDED TO ENVIRONMENTAL CONTRACTOR. EACH TYPE OF CLEAN FILL INTENDED TO BE IMPORTED TO THE SITE (E.G., PROCESSED GRAVEL, ORDINARY BORROW, LOAM, ETC.), MUST BE SAMPLED AND EVALUATED BY THE ENVIRONMENTAL CONTRACTOR PRIOR TO DELIVERY TO THE SITE. IF THE SOIL IS DETERMINED BY THE ENVIRONMENTAL CONTRACTOR TO BE UNSUITABLE FOR SITE USE, CONTRACTOR IS RESPONSIBLE FOR IDENTIFICATION OF ALTERNATE SOURCE OF CLEAN SOIL AND ADDITIONAL SAMPLING LABOR AND LABORATORY COSTS ASSOCIATED WITH SAMPLING, ANALYSIS, AND DATA EVALUATION.
- CONTRACTOR IS RESPONSIBLE FOR STOCKPILING AND SEGREGATING SOILS GENERATED FOR OFF-SITE DISPOSAL AND COVERING ALL STOCKPILES WITH POLY-SHEETING (MINIMUM 6 MIL THICKNESS) PENDING DISPOSAL. THE ENVIRONMENTAL PROFESSIONAL WILL PERFORM ALL DISPOSAL CHARACTERIZATION SAMPLING AND LABORATORY ANALYSIS AND WILL PREPARE DISPOSAL FACILITY PROFILES, CHECKLISTS, AND APPLICATIONS, ETC. DEPENDING ON THE TYPE OF CONTAMINATION, THE CONTRACTOR SHALL ASSUME AND SHALL ARRANGE FOR LOADING, TRANSPORTATION, AND DISPOSAL OF CONTAMINATED SOIL TO THE RI RESOURCE RECOVERY LANDFILL IN JOHNSTON, RI OR TO THE WAYNE DISPOSAL, INC. (WDI) FACILITY IN BELLEVILLE, MI. CONTRACTOR IS RESPONSIBLE FOR PROVIDING COPIES OF ALL PAPERWORK ASSOCIATED WITH OFF-SITE SOIL DISPOSAL TO THE ENVIRONMENTAL PROFESSIONAL, INCLUDING COPIES OF TRANSPORTATION PAPERWORK (E.G., BILLS OF LADING, MATERIAL SHIPPING RECORD, ETC.), TRUCKING WEIGHT SLIPS, AND DISPOSAL FACILITY CLOSE-OUT DOCUMENTATION, AS APPLICABLE.
- CONTRACTOR IS REQUIRED TO DEVELOP AND IMPLEMENT A PROJECT-SPECIFIC HEALTH AND SAFETY PLAN APPLICABLE TO THEIR SITE WORKERS, SUBCONTRACTORS, AND REPRESENTATIVES. DURING ALL SITE ACTIVITIES, CONTRACTOR SHALL FOLLOW GENERALLY ACCEPTED SOIL MANAGEMENT AND HEALTH AND SAFETY PRACTICES, INCLUDING BUT NOT LIMITED TO: SITE SECURITY, WETTING OF SOILS IF REQUIRED TO MINIMIZE NUISANCE DUST GENERATION; COVERING AND SECURING OF ANY STOCKPILES OF NATIVE SOIL MATERIAL WITH POLY SHEETING (6-MIL MINIMUM THICKNESS) TO PREVENT EROSION; PLACEMENT OF CERTIFIED CLEAN IMPORTED SOILS ON TOP OF POLY SHEETING (6-MIL) TO PREVENT CO-MINGLING WITH NATIVE SOILS AND COVERED/SECURED WITH ADDITIONAL POLY SHEETING (6-MIL) TO PREVENT EROSION; CREATION OF STONE PADS IN AREAS OF VEHICLE ENTRY/EXIT AND THE REMOVAL OF SOILS FROM WHEELS OF VEHICLES EXITING SITE; WEAR GLOVES AND OTHER PERSONAL PROTECTIVE EQUIPMENT AS APPLICABLE (HARD HATS, FACE MASKS/COVERINGS, SAFETY BOOTS, EYE PROTECTION, ETC.); WASH HANDS PRIOR TO EATING OR ANY OTHER ACTIVITY WHICH COULD BRING HANDS TO AREA OF THE MOUTH OR FACE.



Sign Summary

M.U.T.C.D. Number	Specification Width	Height	Desc.
R1-1	30"	30"	STOP
R6-1R	36"	12"	ONE WAY
R6-1L	36"	12"	ONE WAY
R5-1	30"	30"	DO NOT ENTER
R3-1	24"	24"	NO LEFT TURN
R3-2	24"	24"	NO RIGHT TURN
R7-8	12"	18"	RESERVED PARKING
R7-8P	12"	6"	VAN ACCESSIBLE

NOTES

- THE EXISTING UTILITIES TO THE EXISTING BUILDING WILL REMAIN. NO NEW UTILITIES ARE PROPOSED AT THIS TIME, UNLESS INDICATED HEREIN.

Zoning Summary Chart

Zoning District(S):	M-1 Light Industrial District		
Zoning Regulation Requirements	Required*	Existing	Proposed
FRONT YARD SETBACK	None	0 Feet	0 Feet (Existing)
INTERIOR SIDE SETBACK	None	0 Feet	0 Feet (Existing)
REAR YARD SETBACK	None	N/A	N/A
MAXIMUM BUILDING HEIGHT	75 Feet	<75 Feet Existing	<75 Feet Existing
PARKING SETBACK FROM ROW	5 Feet	0 Feet	31 Feet
INTERIOR PARKING LANDSCAPING PERCENTAGE, EXCLUDING PERIMETER LANDSCAPING	10%	0%	12%
SITE LANDSCAPE PERCENTAGE **	15%**	0%	15.5%

* Zoning regulation requirements as specified in City of Providence Zoning Ordinance Chapter 2014-39 NO. 513.
** Per CRMC Requirements.



Municipal Parking Lot

50 Sims Avenue
Providence, Rhode Island

No.	Revision	Date	Aspd.

Designed by: _____ Checked by: _____
Issued for: _____ Date: _____
Permits/Bid: _____ July 24, 2020

Not Approved for Construction

Layout, Materials and Utilities Plan

Drawing Number

C-2

Sheet 2 of 7

Project Number 72634.04

Parking Requirements:

BREWERY	20,000 SF	x	1 SPACE	/	1,000	=	20 SPACES
CO-PACKING (WAREHOUSE)	10,000 SF	x	1 SPACE	/	20,000	=	1 SPACES
OFFICE SPACE	10,000 SF	x	1 SPACE	/	500	=	20 SPACES
LIGHT MANUFACTURING	260 EMPLOYEES	x	1 SPACE	/	5	=	52 SPACES
TOTAL PARKING REQUIRED							= 93 SPACES

Parking Summary Chart

Description	Size		Spaces	
	Required	Provided	Required	Provided
STANDARD SPACES	8.5 x 18	8.5 x 18	87	146
COMPACT SPACES (10% ALLOWED)	7.5 x 15	7.5 x 15	0	0
STANDARD ACCESSIBLE SPACES *	8 x 18	8 x 18	5	5
VAN ACCESSIBLE SPACES	11 x 18	11 x 18	1	1
TOTAL SPACES			93	152
LOADING BAYS**			2	5

* ADA REQUIREMENTS: PARKING LOTS WITH 151-200 PARKING SPACES REQUIRE 5 ACCESSIBLE PARKING SPACES.
** LOADING BAYS: TWO BAYS FOR 40,000-100,000 SF GFA

Bicycle Parking Requirements:

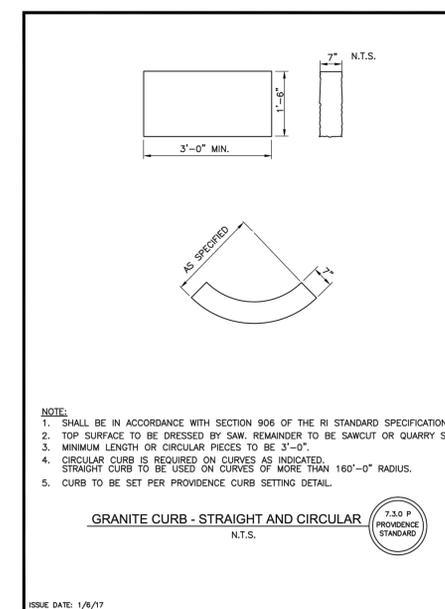
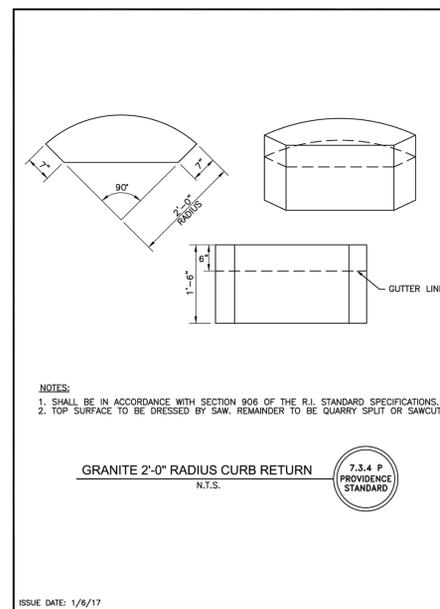
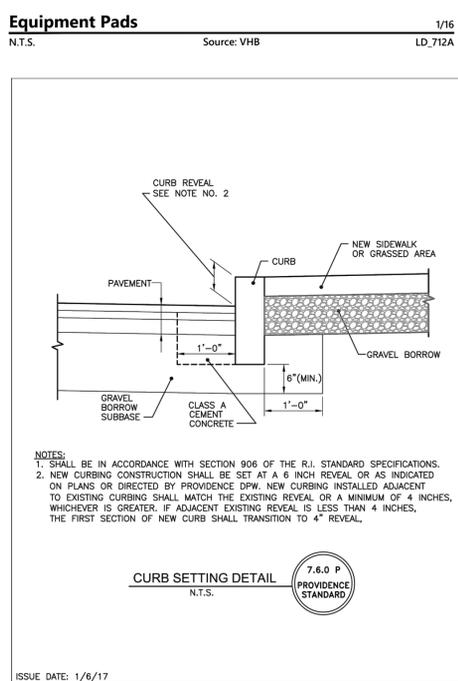
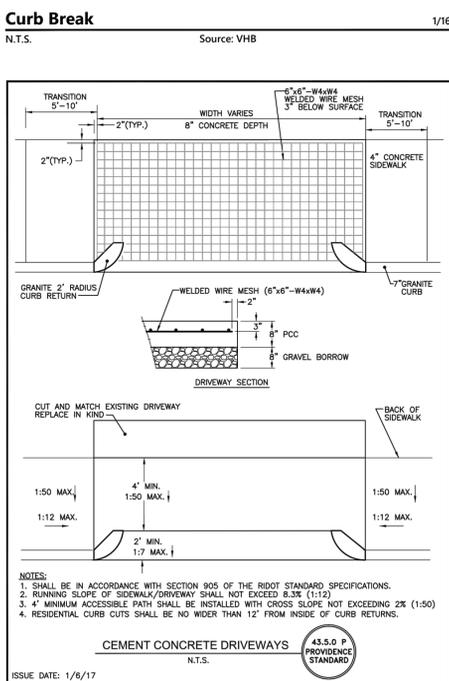
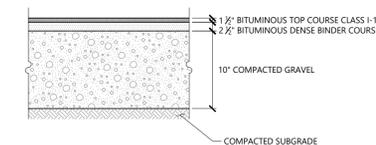
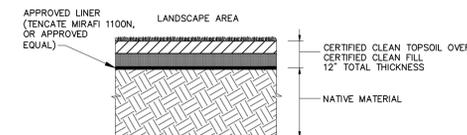
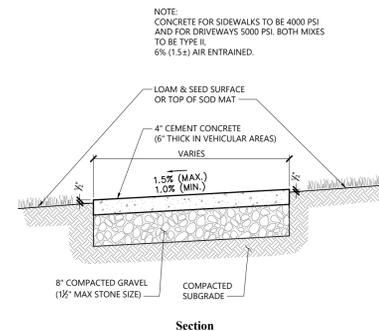
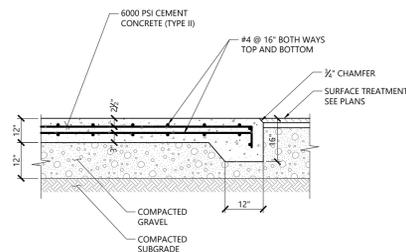
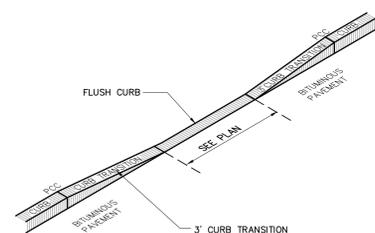
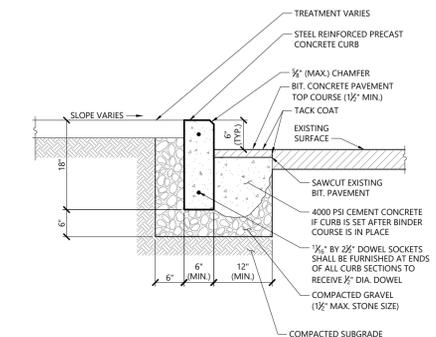
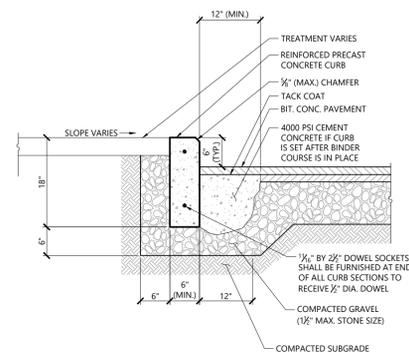
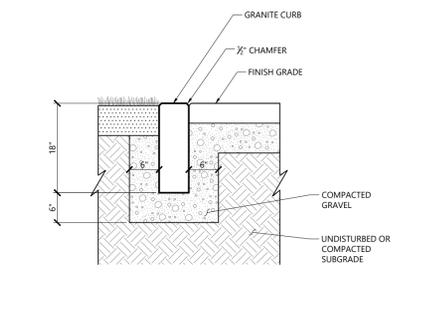
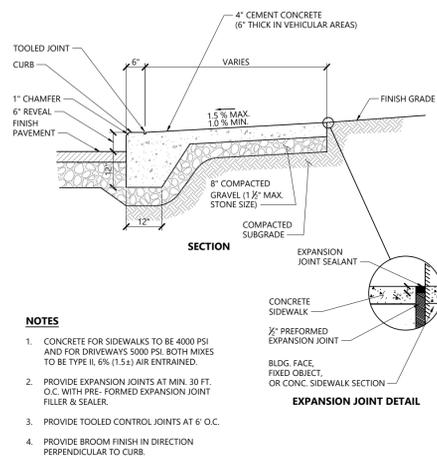
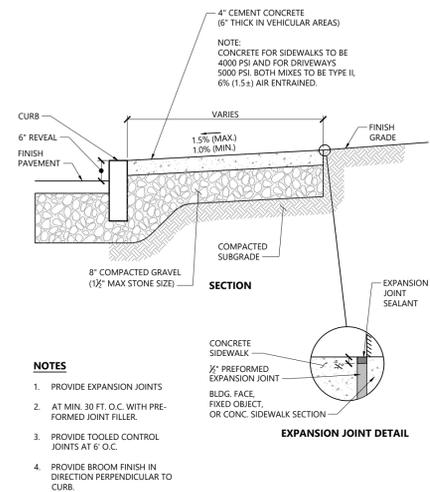
	REQUIRED*	PROVIDED
BREWERY	20,000 SF x 1 SPACES / 5,000 SF GFA = 4 SPACES	4 SPACES
CO-PACKING (WAREHOUSE)	10,000 SF x 1 SPACES / >10,000 SF GFA = 0 SPACES	0 SPACES
OFFICE SPACE	10,000 SF x 1 SPACES / 5,000 SF GFA = 2 SPACES	2 SPACES
LIGHT MANUFACTURING	260 EMPLOYEES x 1 SPACES / 5 EMPLOYEES = 52 SPACES**	0 SPACES**
TOTAL BIKE PARKING *		58 SPACES
		6 SPACES

* AFTER THE FIRST 25 BICYCLE SPACES ARE PROVIDED, ADDITIONAL BICYCLE PARKING SPACES ARE REQUIRED AT A 50% REDUCTION.
** BIKE SPACES FOR LIGHT MANUFACTURING WILL BE LOCATED ONCE THE BUILDING DESIGN IS COMPLETE TO DETERMINE THE BEST LOCATION FOR THE BIKE SPACES RELATIVE TO BUILDING ENTRANCES.

- NOTES:
- PROVIDENCE ZONING: A MINIMUM OF 2 BIKE SPACES SHALL BE PROVIDED FOR ALL USES THAT MUST PROVIDE BIKE SPACES.
 - PROVIDENCE ZONING: 50% OF BIKE SPACES IN OFFICE PARKING SHALL BE LONG TERM SPACES LOCATED IN A COVERED AREA THAT IS EASILY ACCESSIBLE FROM THE PUBLIC ROW AND BUILDING ENTRANCES. THE REST OF THE BIKE SPACES SHALL BE LOCATED WITHIN 50' FROM THE BUILDING ENTRANCE.
 - ALL SPACES TO BE MINIMUM 2FT X 6FT, AS REQUIRED.



1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100



Municipal Parking Lot

50 Sims Avenue
Providence, Rhode Island

No.	Revision	Date	App'd

Designed by _____ Checked by _____

Issued for _____ Date _____

Permits/Bid July 24, 2020

Not Approved for Construction

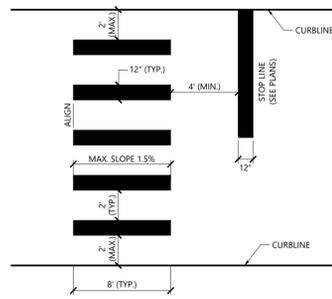
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Drawing Number

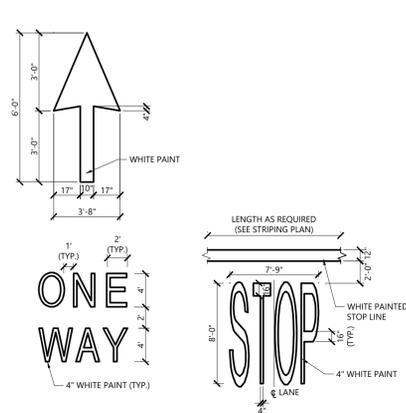
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Sheet 4 of 7

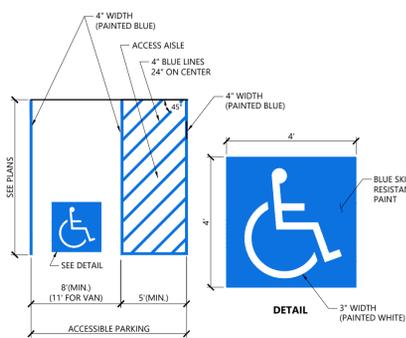
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72634.04



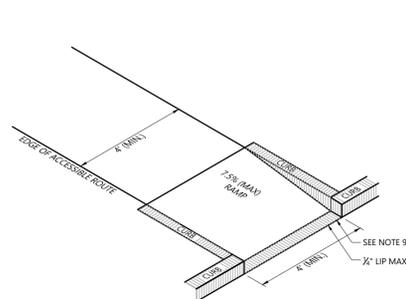
- NOTES**
1. TWELVE INCH (12") LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (TWO - 6 INCH LINES) WILL BE ACCEPTED.
 2. LONGITUDINAL CROSSWALK LINES TO BE PARALLEL TO CURBLINE.
 3. ALL LONGITUDINAL CROSSWALK LINES TO BE THE SAME LENGTH AND PROPERLY ALIGNED.
 4. CROSS WALK SIDESLOPE SHALL NOT EXCEED 1.5%.



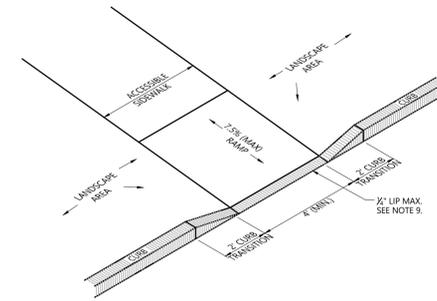
- NOTES**
1. PAVEMENT MARKINGS TO BE INSTALLED FOR ON SITE WORK IN LOCATIONS SHOWN.



- NOTES**
1. ALL DIMENSIONS TO EDGES OF 4" PAVEMENT STRIPING.
 2. 8' STALL WIDTH REFERS TO 8' CLEAR BETWEEN INSIDE EDGES OF PAVEMENT MARKINGS.
 3. ALL SLOPES THROUGHOUT THE ACCESSIBLE PARKING AND AISLE AREAS SHALL NOT EXCEED 1.5%.



- NOTES**
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1.5% MAX).
 2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMP SHALL BE 5%.
 3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMP SHALL BE 7.5%.
 4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
 5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
 6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
 7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
 8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' X 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
 9. ELIMINATE CURBING (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAY.



- NOTES**
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1.5% MAX).
 2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMP SHALL BE 5%.
 3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMP SHALL BE 7.5%.
 4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
 5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
 6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
 7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
 8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' X 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
 9. ELIMINATE CURBING (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAY.

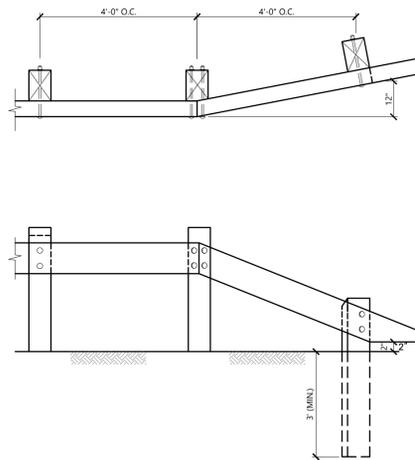
Crosswalk 1/16
N.T.S. Source: VHB LD_553

Painted Pavement Markings - On Site 1/16
N.T.S. Source: VHB LD_554

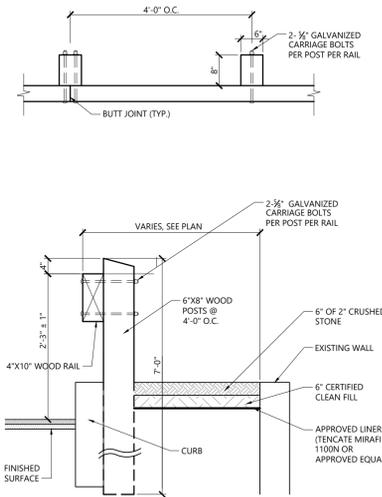
Accessible Parking Space 1/16
N.T.S. Source: VHB LD_552

Accessible Curb Ramp (ACR) Type 'J' 1/16
N.T.S. Source: VHB LD_509

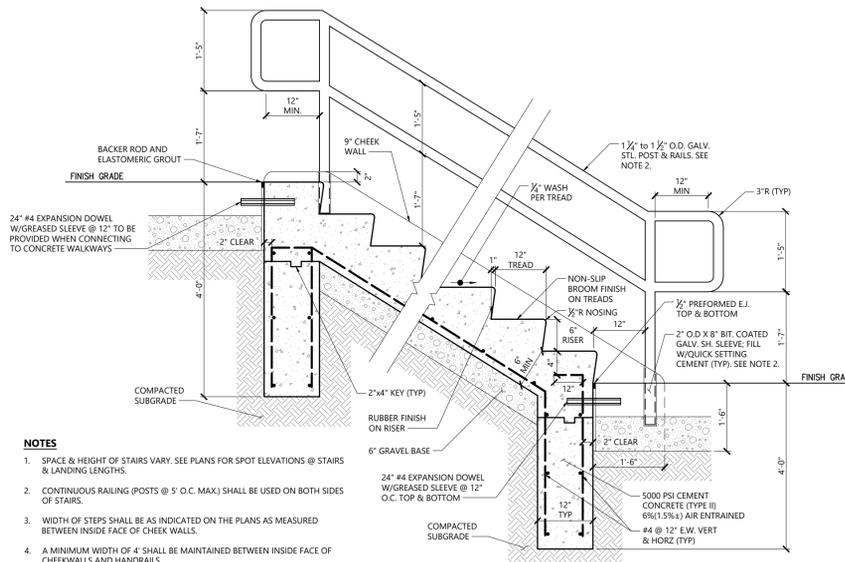
Accessible Curb Ramp (ACR) Type 'M' 1/16
N.T.S. Source: VHB LD_512



Wood Guardrail - Tapered End 1/16
N.T.S. Source: VHB LD_451

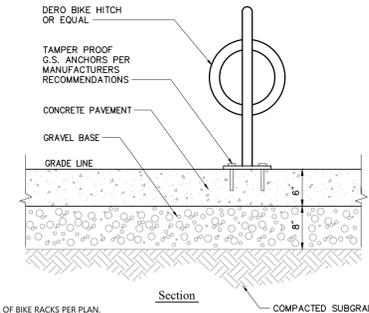
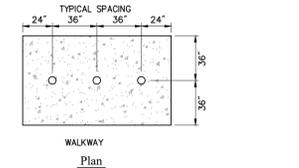


Wood Guardrail 1/16
N.T.S. Source: VHB LD_450



- NOTES**
1. SPACE & HEIGHT OF STAIRS VARY. SEE PLANS FOR SPOT ELEVATIONS @ STAIRS & LANDING LENGTHS.
 2. CONTINUOUS RAILING (POSTS @ 5' O.C. MAX) SHALL BE USED ON BOTH SIDES OF STAIRS.
 3. WIDTH OF STEPS SHALL BE AS INDICATED ON THE PLANS AS MEASURED BETWEEN INSIDE FACE OF CHEEK WALLS.
 4. A MINIMUM WIDTH OF 4' SHALL BE MAINTAINED BETWEEN INSIDE FACE OF CHEEK WALLS AND HANDRAILS.

Concrete Steps with Handrail 11/15
N.T.S. Source: VHB LD_765



- NOTES**
1. NUMBER OF BIKE RACKS PER PLAN.
 2. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

Bicycle Rack - Surface Mount
N.T.S. Source: VHB

Municipal Parking Lot

50 Sims Avenue
Providence, Rhode Island

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Issued for _____ Date _____

Permits/Bid July 24, 2020

Not Approved for Construction

Site Details 2

Drawing Number

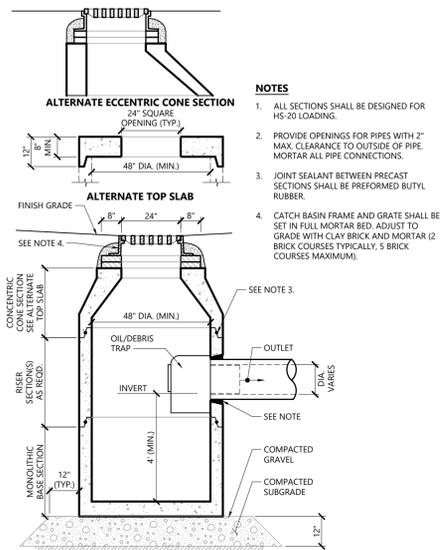
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Sheet of 5 7

Project Number 72634.04

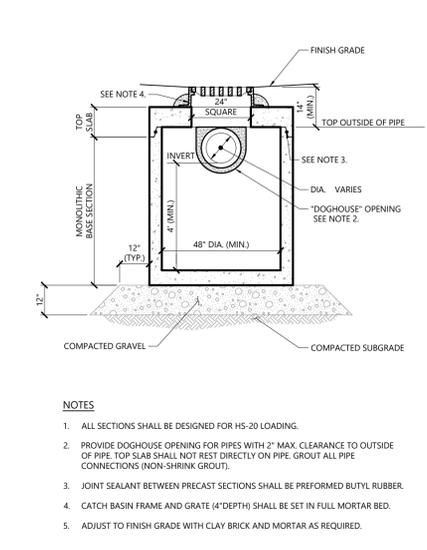


1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100



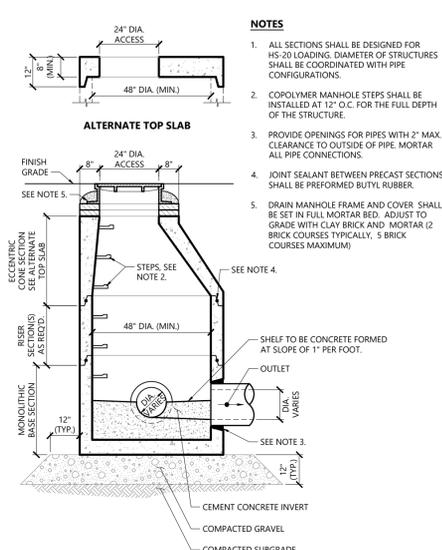
- NOTES**
1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADINGS.
 2. PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
 3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
 4. CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

Catch Basin (CB) With Oil/Debris Trap 1/16
N.T.S. Source: VHB LD_101



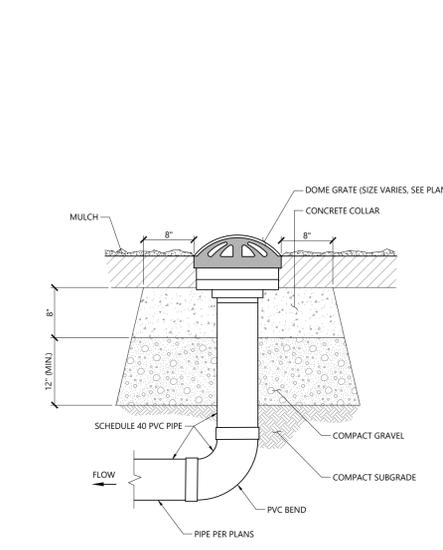
- NOTES**
1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADINGS.
 2. PROVIDE DOGHOUSE OPENING FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. TOP SLAB SHALL NOT REST DIRECTLY ON PIPE. GROUT ALL PIPE CONNECTIONS (NON-SHRINK GROUT).
 3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
 4. CATCH BASIN FRAME AND GRATE (4" DEPTH) SHALL BE SET IN FULL MORTAR BED.
 5. ADJUST TO FINISH GRADE WITH CLAY BRICK AND MORTAR AS REQUIRED.

Catch Basin (CB) Shallow Cover 1/16
N.T.S. Source: VHB LD_104

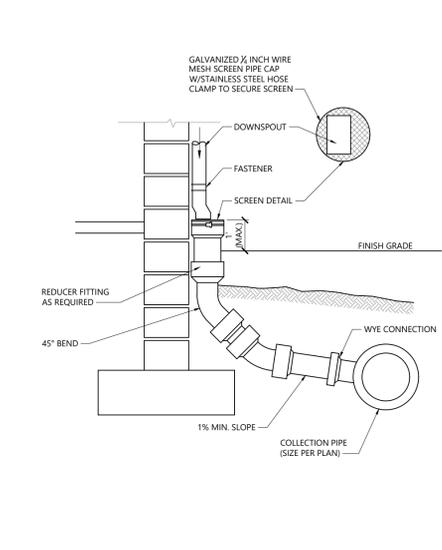


- NOTES**
1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADINGS. DIAMETER OF STRUCTURES SHALL BE COORDINATED WITH PIPE CONFIGURATIONS.
 2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
 3. PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
 4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
 5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

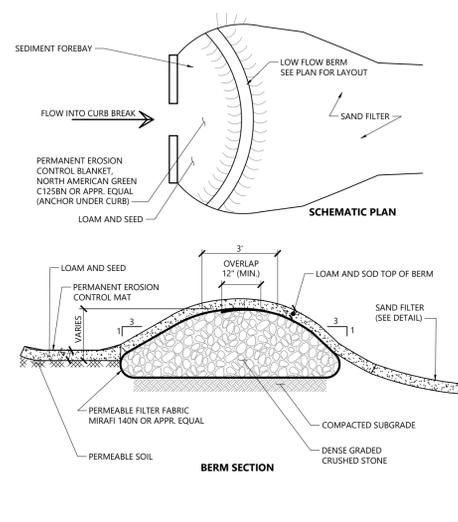
Drain Manhole (DMH) 1/16
N.T.S. Source: VHB LD_115



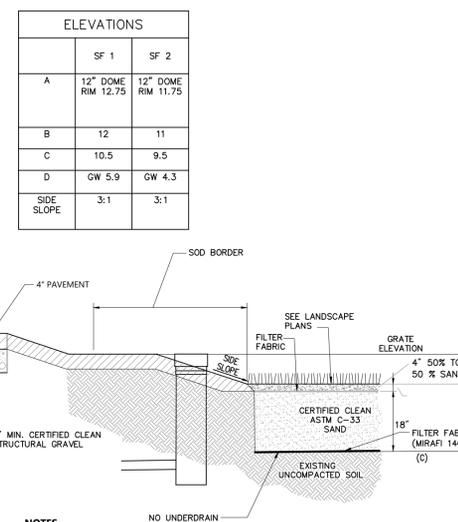
Landscape Drain (LD) 1/16
N.T.S. Source: VHB REV LD_193



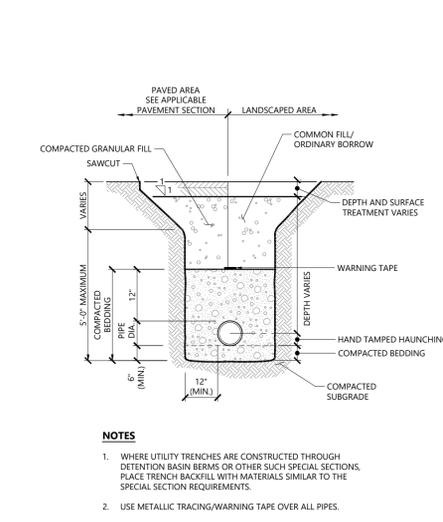
Downspout Rain Leader 1/16
N.T.S. Source: VHB LD_195



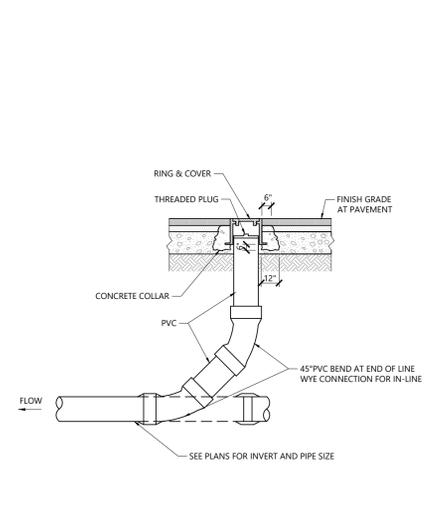
Low Flow Sediment Forebay Berm 1/16
N.T.S. Source: VHB REV LD_165



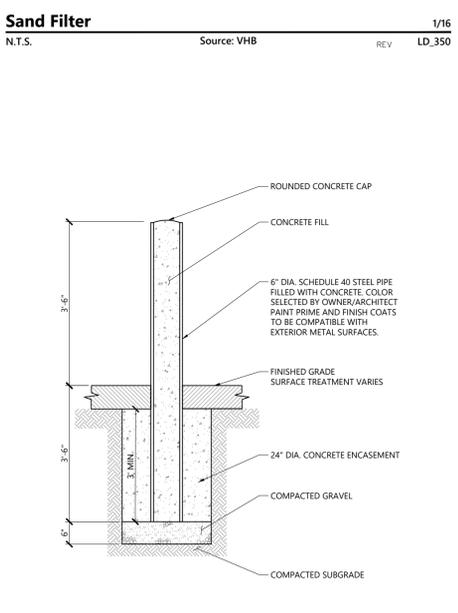
Sand Filter 1/16
N.T.S. Source: VHB REV LD_350



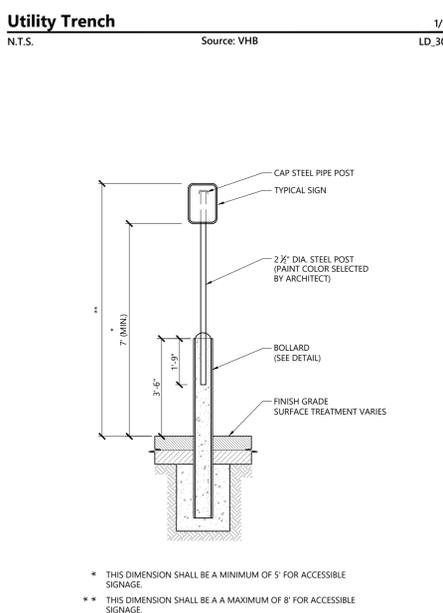
Utility Trench 1/16
N.T.S. Source: VHB LD_300



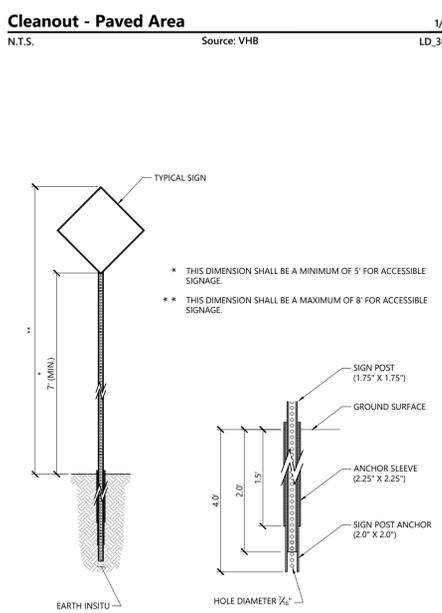
Cleanout - Paved Area 1/16
N.T.S. Source: VHB LD_303



Bollard 9/17
N.T.S. Source: VHB LD_700



Bollard Mounted Sign 1/16
N.T.S. Source: VHB LD_703



Sign Post - Type 'B' 1/16
N.T.S. Source: VHB LD_702

Municipal Parking Lot
50 Sims Avenue
Providence, Rhode Island

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Issued for _____ Date _____

Permits/Bid July 24, 2020

Not Approved for Construction

Site Details 3



C-6

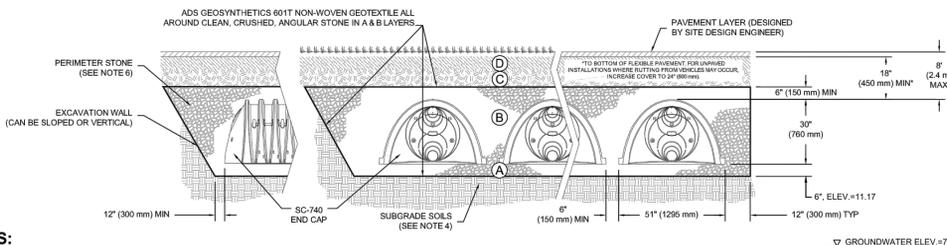


1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'C' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE 'B' LAYER TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145' A-1, A-2-4, A-3 OR AASHTO M43' 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. **

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE"
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



NOTES:

- SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2416 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

SC-740 STANDARD CROSS SECTION

DATE: 11/18/14
DRAWN: JLM
CHECKED: JLM

PROJECT #:

DESIGNER: JLM

REVISIONS:

NO. DATE DESCRIPTION

1 11/18/14

2 11/18/14

3 11/18/14

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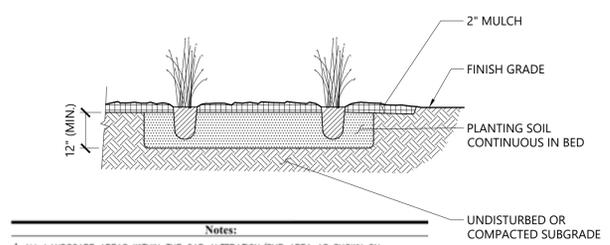
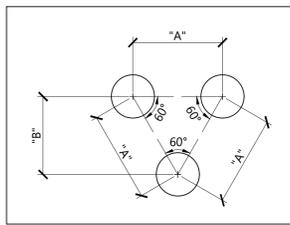
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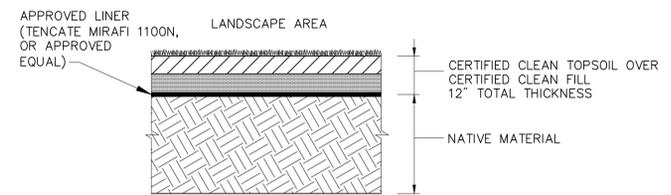
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PLANT SPACING	
PLANT SPACING("A")	ROW SPACING ("B")
6 IN. O.C.	5 IN. O.C.
8 IN. O.C.	7 IN. O.C.
10 IN. O.C.	8 1/2 IN. O.C.
12 IN. O.C.	10 1/2 IN. O.C.
15 IN. O.C.	13 IN. O.C.
18 IN. O.C.	16 IN. O.C.
24 IN. O.C.	21 IN. O.C.
30 IN. O.C.	26 IN. O.C.
36 IN. O.C.	30 IN. O.C.
48 IN. O.C.	42 IN. O.C.
54 IN. O.C.	48 IN. O.C.
60 IN. O.C.	54 IN. O.C.



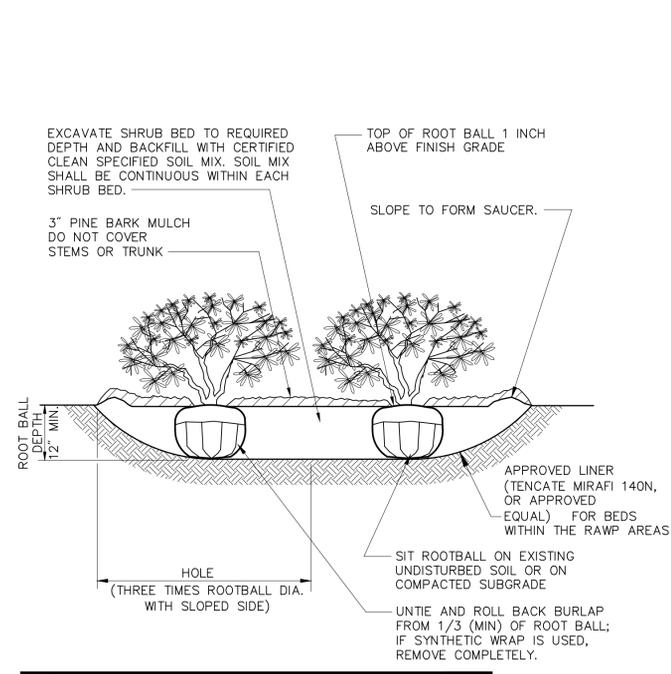
Notes:
1. ALL LANDSCAPE AREAS WITHIN THE CAP ALTERATION/SMP AREA AS SHOWN ON THE LAYOUT AND MATERIALS PLAN SHALL BE CONSTRUCTED ACCORDING TO THIS DETAIL AND IN ACCORDANCE WITH THE CAP ALTERATION/SMP.

Perennial and Ornamental Grass Planting 8/07
N.T.S. Source: VHB



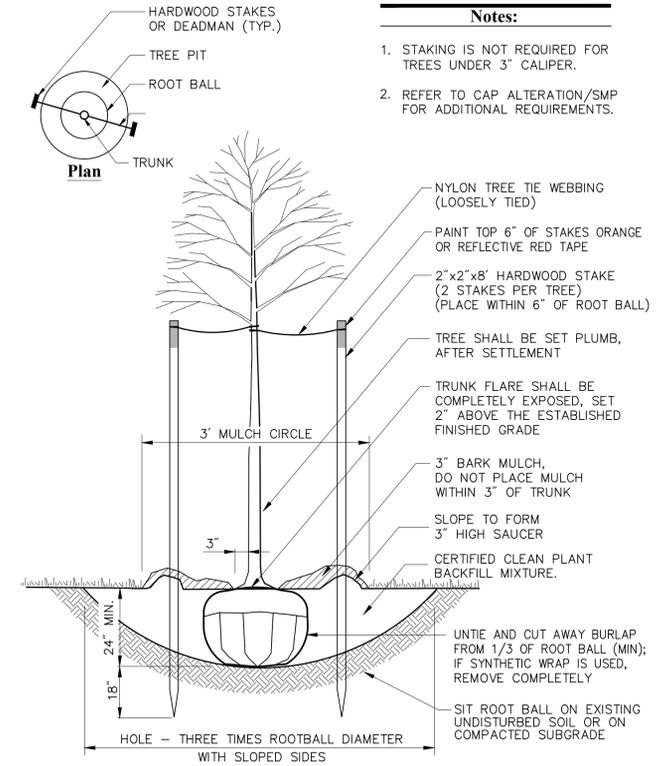
Notes:
1. ALL LANDSCAPE AREAS WITHIN THE CAP ALTERATION/SMP AREA AS SHOWN ON THE LAYOUT AND MATERIALS PLAN SHALL BE CONSTRUCTED ACCORDING TO THIS DETAIL AND IN ACCORDANCE WITH THE CAP ALTERATION/SMP.

Landscape Area 8/07
N.T.S. Source: VHB



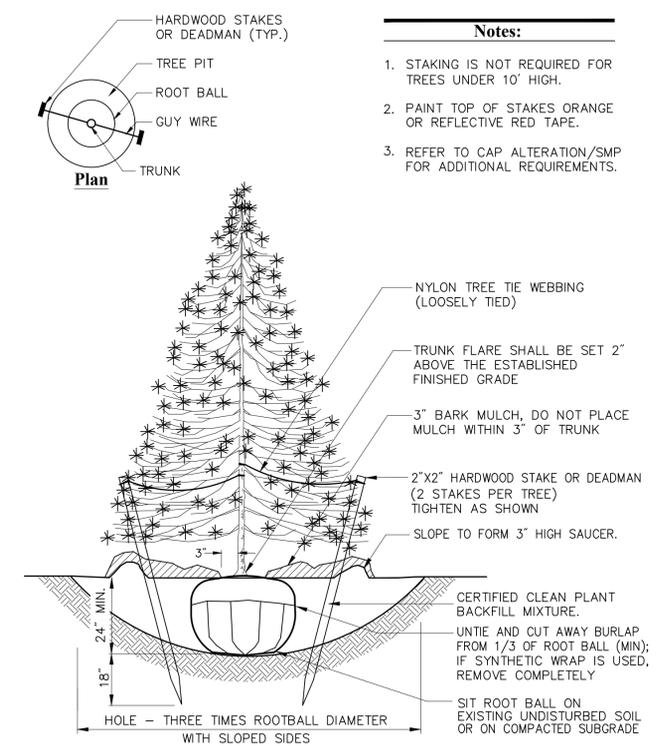
Notes:
1. LOOSEN ROOTS AT THE OUTER EDGE OF ROOTBALL OF CONTAINER GROWN SHRUBS.
2. REFER TO CAP ALTERATION/SMP FOR ADDITIONAL REQUIREMENTS FOR PLANTING BEDS WITHIN THE CAP ALTERATION/SMP AREAS.

Shrub Bed Planting 6/08
N.T.S. Source: VHB REV LD_601



Notes:
1. STAKING IS NOT REQUIRED FOR TREES UNDER 3" CALIPER.
2. REFER TO CAP ALTERATION/SMP FOR ADDITIONAL REQUIREMENTS.

Tree Planting (For Trees Under 4" Caliper) 1/10
N.T.S. Source: VHB REV LD_602



Notes:
1. STAKING IS NOT REQUIRED FOR TREES UNDER 10' HIGH.
2. PAINT TOP OF STAKES ORANGE OR REFLECTIVE RED TAPE.
3. REFER TO CAP ALTERATION/SMP FOR ADDITIONAL REQUIREMENTS.

Evergreen Tree Planting 6/08
N.T.S. Source: VHB REV LD_604

Municipal Parking Lot
50 Sims Avenue
Providence, Rhode Island

No.	Revision	Date	App'd.

Designed by _____ Checked by _____
Issued for _____ Date _____
Permits/Bid July 24, 2020

Not Approved for Construction
Planting Details

L-2

Sheet of 7

General

- CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
- AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC) SHALL RECEIVE 4 INCHES LOAM AND SEED.
- UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
- CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
- CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
- THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND FALLS WITHIN THE RIPDES CONSTRUCTION GENERAL PERMIT (CGP) PROGRAM AND RIDEM JURISDICTION. PRIOR TO THE START OF CONSTRUCTION CONTRACTOR IS TO FILE A NOTICE OF INTENT WITH THE RIDEM AND PREPARE AND MAINTAIN A SOIL EROSION AND SEDIMENTATION PLAN IN ACCORDANCE WITH THE RIPDES REGULATIONS.
- STAGING AND STOCKPILE AREAS SHALL NOT BE LOCATED WITHIN ANY WETLAND AND ABUTTING RESOURCE AREA AND SHALL BE LOCATED WITHIN THE LOD.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND INSTALLING THE FOLLOWING ITEMS ON SITE AND REDLINING THE PLAN FOR RECORD KEEPING PURPOSES AS REQUIRED BY THE RIPDES PERMIT:
 - BUILDING MATERIALS STAGING AREAS
 - STOCKPILE AREAS. EROSION CONTROLS SHALL BE PLACED AT THE BASE OF ALL STOCKPILES
 - DESIGNATED WASHOUT AND REFUELING AREAS.
 - TEMPORARY SEDIMENT BASIN AREAS.

Erosion Control

- PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
- CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES DAILY, AND REMOVE SEDIMENT THEREFROM ON A WEEKLY BASIS AND WITHIN TWELVE HOURS AFTER EACH STORM EVENT AND DISPOSE OF SEDIMENTS IN AN UPLAND AREA SUCH THAT THEY DO NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
- CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
- CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
- UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.
- A CROSS SLOPE SHALL BE PLACED ON THE STABILIZED CONSTRUCTION EXIT TO DIRECT RUNOFF TO AN ONSITE SETTLING AREA. IF DEEMED NECESSARY AFTER CONSTRUCTION BEGINS, A WASH PAD MAY BE INCLUDED TO WASH OFF VEHICLE WHEELS BEFORE LEAVING THE PROJECT SITE.
- TEMPORARY SEDIMENT BASINS WILL BE DESIGNED EITHER AS EXCAVATIONS OR BERMED STORMWATER DETENTION STRUCTURES THAT WILL RETAIN RUNOFF FOR A SUFFICIENT PERIOD OF TIME TO ALLOW SUSPENDED SOIL PARTICLES TO SETTLE OUT PRIOR TO DISCHARGE. BASINS WILL BE LOCATED AS DETERMINED BY THE CONTRACTOR BASED ON CONSTRUCTION NEEDS. POINT OF DISCHARGE FROM SEDIMENT BASINS WILL BE STABILIZED TO MINIMIZE EROSION.
- VEGETATIVE SLOPE STABILIZATION WILL BE IMPLEMENTED WITHIN 14 DAYS AFTER GRADING OR CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. VEGETATIVE SLOPE STABILIZATION WILL BE USED TO MINIMIZE EROSION ON SLOPES OF 3:1 OR STEEPER. ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED BY HYDRO-SEEDING OR SODDING. A SUITABLE TOPSOIL, GOOD SEEDBED PREPARATION, AND ADEQUATE LIME, FERTILIZER AND WATER WILL BE PROVIDED FOR EFFECTIVE ESTABLISHMENT OF THESE VEGETATIVE STABILIZATION METHODS. MULCH WILL ALSO BE USED AFTER PERMANENT SEEDING TO PROTECT SOIL FROM THE IMPACT OF FALLING RAIN AND TO INCREASE THE CAPACITY OF THE SOIL TO ABSORB WATER.
- STABILIZATION OF DISTURBED AREAS MUST BE INITIATED IMMEDIATELY WHENEVER CLEARING, GRADING, EXCAVATION OR OTHER EARTH DISTURBANCE ACTIVITIES ARE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT BE RESUMED FOR A PERIOD EXCEEDING FOURTEEN (14) CALENDAR DAYS. STABILIZATION MUST BE COMPLETED USING VEGETATIVE STABILIZATION MEASURES WHERE POSSIBLE.
- ALL DISTURBED SOILS EXPOSED PRIOR TO OCTOBER 15TH SHALL BE SEED BY THAT DATE. ANY SUCH AREAS WHICH DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION BY NOVEMBER 15TH MUST BE STABILIZED THROUGH THE USE OF NON-VEGETATIVE EROSION CONTROL MEASURES. IF WORK CONTINUES WITHIN ANY OF THESE AREAS DURING THE PERIOD FROM OCTOBER 15TH TO APRIL 15TH CARE MUST BE TAKEN TO ENSURE THAT ONLY THE AREA REQUIRED FOR THE DAY'S WORK IS EXPOSED, AND ALL ERODIBLE SOIL MUST BE STABILIZED WITHIN FIVE (5) WORKING DAYS.

Infiltration Basin Protection During Construction

FOR THE LONG-TERM FUNCTION OF THE INFILTRATION SYSTEM CARE MUST BE TAKEN IN THIS AREA DURING CONSTRUCTION. THE CONTRACTOR SHALL EMPLOY THE FOLLOWING MINIMUM BEST MANAGEMENT PRACTICES (BMPs):

- THESE AREAS SHALL NOT BE USED AS CONSTRUCTION SEDIMENTATION SYSTEMS.
- INITIAL BASIN EXCAVATION SHOULD BE CARRIED TO WITHIN 1 FOOT OF THE FINAL ELEVATION OF THE BASIN FLOOR. FINAL EXCAVATION SHOULD BE DEFERRED UNTIL ALL DISTURBED AREAS CONTRIBUTING TO THE BASIN HAVE BEEN STABILIZED OR PROTECTED. PRIOR TO FINAL EXCAVATION, REMOVE ALL ACCUMULATED SEDIMENT.
- CONSTRUCTION EQUIPMENT, VEHICULAR, AND STOCKPIILING OF CONSTRUCTION AND EARTH MATERIALS SHALL BE OUTSIDE THE LIMITS OF THESE AREAS. THE SUBGRADE BENEATH SHALL NOT BE COMPACTED.
- EXCAVATION FOR CONSTRUCTION OF THESE SYSTEMS SHALL BE PERFORMED MANUALLY OR BY LIGHT-TRACKED EQUIPMENT TO AVOID COMPACTION OF THE BASIN FLOOR.
- THE CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION FENCING AROUND THE PERIMETER OF THE SYSTEMS TO PREVENT THE USE OF THESE AREAS FOR ALL ACTIVITIES THAT MIGHT DAMAGE THE INFILTRATION CAPABILITIES. THE FENCING MAY BE REMOVED FOR BACKFILLING AND FINAL CONSTRUCTION.

Sand Filter Protection During Construction

FOR THE LONG-TERM FUNCTION OF THE SAND FILTER, CARE MUST BE TAKEN IN THIS AREA DURING CONSTRUCTION. THE CONTRACTOR SHALL EMPLOY THE FOLLOWING MINIMUM BEST MANAGEMENT PRACTICES (BMPs):

- THESE AREAS SHALL NOT BE USED AS CONSTRUCTION SEDIMENTATION SYSTEMS.
- ALL STORMWATER RUNOFF FROM EXPOSED SURFACES SHALL BE DIRECTED AWAY FROM THESE AREAS.
- CONSTRUCTION EQUIPMENT, VEHICULAR, AND STOCKPIILING OF CONSTRUCTION AND EARTH MATERIALS SHALL BE OUTSIDE THE LIMITS OF THESE AREAS. THE SUBGRADE BENEATH SHALL NOT BE COMPACTED.
- EXCAVATION FOR CONSTRUCTION OF THESE SYSTEMS SHALL BE PERFORMED MANUALLY OR BY HYDRAULIC EXCAVATOR OR SOME OTHER SIMILAR MEANS TO ENSURE THAT THE EQUIPMENT IS NOT IN DIRECT CONTACT WITH THE NATURAL FILTRATION EARTH MATERIAL AND DOES NOT CAUSE COMPACTION OF THE SUBGRADE.
- THE CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION FENCING AROUND THE PERIMETER OF THE SYSTEMS TO PREVENT THE USE OF THESE AREAS FOR ALL ACTIVITIES THAT MIGHT DAMAGE THE INFILTRATION CAPABILITIES. THE FENCING MAY BE REMOVED FOR BACKFILLING AND FINAL CONSTRUCTION.
- THE SAND FILTER SHALL BE PROTECTED WITH EROSION CONTROLS IMMEDIATELY UPON INSTALLATION TO PREVENT CLOGGING OF FILTER MATERIALS. THESE AREAS SHALL NOT BE USED AS SEDIMENTATION OR DEWATERING BASINS.

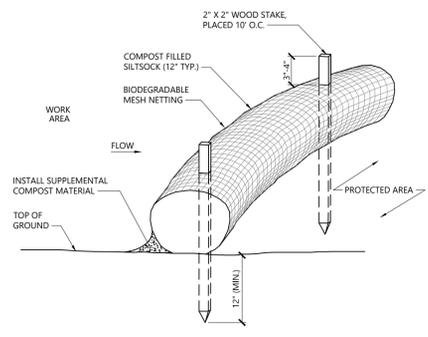
Erosion Control Maintenance Requirements

SITE OWNERS AND OPERATORS MUST ENSURE THAT ALL EROSION, RUNOFF, SEDIMENT, AND POLLUTION PREVENTION CONTROLS REMAIN IN EFFECTIVE OPERATING CONDITION AND ARE PROTECTED FROM ACTIVITIES THAT WOULD REDUCE THEIR EFFECTIVENESS. SITE OWNERS AND OPERATORS MUST ALSO ENSURE THAT ALL EROSION, RUNOFF, SEDIMENT, AND POLLUTION PREVENTION CONTROLS ARE INSPECTED AT THE REQUIRED FREQUENCY REQUIREMENTS LISTED BELOW. IF THE DESIGNATED SITE INSPECTOR FINDS A PROBLEM (I.E. EROSION, RUNOFF, SEDIMENT OR POLLUTION PREVENTION CONTROLS REQUIRE REPLACEMENT, REPAIR, OR MAINTENANCE), THE OWNER AND OPERATOR MUST ENSURE THAT THE NECESSARY REPAIRS OR MODIFICATIONS ARE MADE IN ACCORDANCE WITH THE FOLLOWING:

- INITIATE WORK TO FIX THE PROBLEM IMMEDIATELY AFTER DISCOVERING THE PROBLEM, AND COMPLETE SUCH WORK BY THE CLOSE OF THE NEXT WORK DAY, IF THE PROBLEM DOES NOT REQUIRE SIGNIFICANT REPAIR OR REPLACEMENT, OR IF THE PROBLEM CAN BE CORRECTED THROUGH ROUTINE MAINTENANCE.
- WHEN INSTALLATION OF A NEW CONTROL OR A SIGNIFICANT REPAIR IS NEEDED, SITE OWNERS AND OPERATORS MUST ENSURE THAT THE NEW OR MODIFIED CONTROL PRACTICE IS INSTALLED AND MADE OPERATIONAL BY NO LATER THAN SEVEN (7) CALENDAR DAYS FROM THE TIME OF DISCOVERY WHERE FEASIBLE. IF IT IS INFEASIBLE TO COMPLETE THE INSTALLATION OR REPAIR WITHIN SEVEN (7) CALENDAR DAYS, THE REASONS WHY IT IS INFEASIBLE MUST BE DOCUMENTED IN THE SESC PLAN ALONG WITH THE SCHEDULE FOR INSTALLING THE STORMWATER CONTROL(S) AND MAKING IT OPERATIONAL AS SOON AS PRACTICABLE AFTER THE 7-DAY TIMEFRAME. WHERE THESE ACTIONS RESULT IN CHANGES TO ANY OF THE STORMWATER CONTROL MEASURES OUTLINED IN THE SESC PLAN, SITE OWNERS AND OPERATORS MUST MODIFY THE SESC PLAN ACCORDINGLY WITHIN SEVEN (7) CALENDAR DAYS OF COMPLETING THIS WORK IN ACCORDANCE WITH THE FOLLOWING:
 - THE OWNER AND OPERATOR SHALL AMEND THE SESC PLAN WITHIN SEVEN (7) DAYS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE OR OTHER PROCEDURE WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS, OR IF THE SESC PLAN PROVES TO BE INEFFECTIVE IN ACHIEVING ITS OBJECTIVES. IN ADDITION, THE SESC PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW OPERATOR THAT WILL IMPLEMENT A COMPONENT OF THE SESC PLAN. THE AMENDED SESC PLAN MUST BE KEPT ON FILE AT THE CONSTRUCTION SITE AND ANY SESC PLAN MODIFICATIONS MUST BE DOCUMENTED. ANY AMENDMENTS TO CONTROL MEASURES WHICH INVOLVED THE PRACTICE OF ENGINEERING, MUST FIRST BE REVIEWED, SIGNED, AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF RHODE ISLAND.
- IF CORRECTIVE ACTIONS ARE REQUIRED, THE SITE OWNER AND OPERATOR MUST ENSURE THAT ALL CORRECTIVE ACTIONS ARE DOCUMENTED ON THE INSPECTION REPORT IN WHICH THE PROBLEM WAS FIRST DISCOVERED. THESE CORRECTIVE ACTIONS MUST BE DOCUMENTED, SIGNED, AND DATED BY THE SITE OPERATOR ONCE ALL NECESSARY REPAIRS HAVE BEEN COMPLETED.
- SOIL EROSION AND SEDIMENT CONTROL INSPECTION REQUIREMENTS

MINIMUM FREQUENCY - EACH OF THE FOLLOWING AREAS MUST BE INSPECTED BY OR UNDER THE SUPERVISION OF THE OWNER AND OPERATOR AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY FOUR (24) HOURS AFTER ANY STORM EVENT WHICH GENERATES AT LEAST 0.25 INCHES OF RAINFALL PER TWENTY-FOUR (24) HOUR PERIOD AND/OR AFTER A SIGNIFICANT AMOUNT OF RUNOFF:

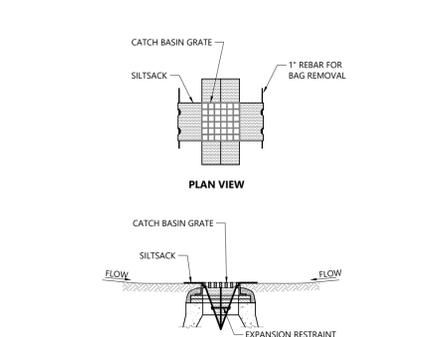
 - ALL AREAS THAT HAVE BEEN CLEARED, GRADED, OR EXCAVATED AND THAT HAVE NOT YET COMPLETED STABILIZATION;
 - ALL STORMWATER EROSION, RUNOFF, AND SEDIMENT CONTROL MEASURES (INCLUDING POLLUTION PREVENTION PRACTICES) INSTALLED AT THE SITE TO COMPLY WITH THIS PERMIT;
 - CONSTRUCTION MATERIAL, UNSTABILIZED SOIL STOCKPILES, WASTE, BORROW, OR EQUIPMENT STORAGE, AND MAINTENANCE AREAS THAT ARE COVERED BY THIS PERMIT AND ARE EXPOSED TO PRECIPITATION;
 - ALL AREAS WHERE STORMWATER TYPICALLY FLOWS WITHIN THE SITE, INCLUDING TEMPORARY DRAINAGE WAYS DESIGNED TO DIVERT, CONVEY, AND/OR TREAT STORMWATER;
 - ALL POINTS OF DISCHARGE FROM THE SITE;
 - ALL LOCATIONS WHERE TEMPORARY OR PERMANENT SOIL STABILIZATION MEASURES HAVE BEEN IMPLEMENTED.
 - ALL LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.



NOTES

- SILT SOCK SHALL BE FILTREXX SILT SOCKX, OR APPROVED EQUAL.
- SILT SOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
- SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
- COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
- IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

Siltsack - Erosion Control Barrier	1/16
N.T.S.	LD_658
Source: VHB	



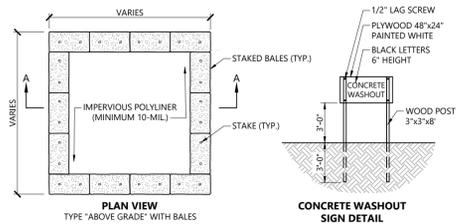
NOTES

- INSTALL SILT SACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND HAY BALES HAVE BEEN REMOVED.
- GRATE TO BE PLACED OVER SILT SACK.
- SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.

Siltsack Sediment Trap	1/16
N.T.S.	LD_674
Source: VHB	

Remediation of Contaminated Materials

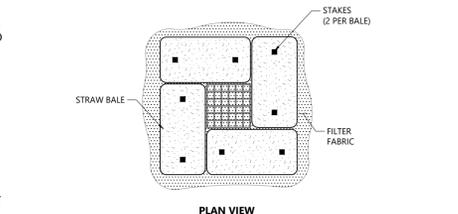
- THE SITE HAS BEEN ASSESSED FOR VARIOUS ENVIRONMENTAL PARAMETERS. THE ENVIRONMENTAL FINDINGS INDICATE THE PRESENCE OF TOTAL PETROLEUM HYDROCARBONS (TPH), VARIOUS HEAVY METALS (PRIMARILY ARSENIC AND LEAD) AND POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) IN SOIL AT LEVELS WHICH ARE GREATER THAN APPLICABLE RIDEM CRITERIA. THE ENTIRE SITE IS COVERED BY AN ENGINEERED BARRIER (I.E. SITE CAP) AND IS REGULATED BY THE RIDEM OFFICE OF LAND REVITALIZATION AND SUSTAINABLE MATERIAL MANAGEMENT (LR&SMM). WORK MUST COMPLY WITH THE "CAP ALTERATION AND SOIL MANAGEMENT PLAN (SMP)" DATED JULY 17, 2020. SEVERAL KEY ELEMENTS OF THE CAP ALTERATION AND SMP ARE SPECIFIED BELOW, BUT IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE PLAN AND INCORPORATE ALL REQUIREMENTS INTO THEIR SCOPE/FEE AND IMPLEMENT AS APPROPRIATE THROUGHOUT THE PROJECT.
- ALL SITE WORK INVOLVING THE DISTURBANCE, MANAGEMENT, AND DISPOSAL OF CONTAMINATED MEDIA (SOIL AND/OR GROUNDWATER) GENERATED DURING THE PROJECT AND INVOLVING THE CONSTRUCTION OF THE NEW CAP MUST BE COMPLETED BY WORKERS WITH CURRENT 40-HOUR OSHA HAZWOPER CERTIFICATION.
- AS STIPULATED IN THE CAP ALTERATION AND SOIL MANAGEMENT PLAN, AND AS SHOWN ON THE LAYOUT AND MATERIALS PLAN, THE CONTRACTOR IS TO ENCAPSULATE THE SITE VIA ONE OR MORE OF THE FOLLOWING METHODS IN ACCORDANCE WITH THE SITE DEVELOPMENT PLANS AND SPECIFICATIONS:
 - A MINIMUM OF 2 FEET OF CERTIFIED CLEAN FILL OVER EXISTING SUBGRADE;
 - A GEOTEXTILE FABRIC ON TOP OF EXISTING SUBGRADE WITH A MINIMUM OF 1 FOOT OF CERTIFIED CLEAN FILL OVER THE GEOTEXTILE FABRIC (TENCATE MIRAFI 1100N, OR APPROVED EQUAL);
 - A MINIMUM OF 4-INCHES OF ASPHALT, CONCRETE PAVERS, OR CONCRETE OVER 6-INCHES OF CERTIFIED CLEAN BASE MATERIAL.
- CONTRACTOR MUST IDENTIFY SOURCE(S) OF CLEAN SOIL. A MINIMUM OF 2 WEEKS PRIOR TO DESIRED DELIVERY OF CLEAN SOIL TO SITE TO PROVIDE ADEQUATE TIME FOR ENVIRONMENTAL PROFESSIONAL TO COORDINATE/SCHEDULE SOIL SAMPLING AND REVIEW OF LABORATORY RESULTS UNDER NORMAL LABORATORY TURN-AROUND TIMES (7-10 BUSINESS DAYS). CONTRACTOR IS RESPONSIBLE FOR THE COST OF LABORATORY SURCHARGES FOR TURNAROUND TIMES SHORTER THAN 7 BUSINESS DAYS, IF APPLICABLE DUE TO LACK OF ADEQUATE NOTICE (2-WEEKS MINIMUM) PROVIDED TO ENVIRONMENTAL CONTRACTOR. EACH TYPE OF CLEAN FILL INTENDED TO BE IMPORTED TO THE SITE (E.G., PROCESSED GRAVEL, ORDINARY BORROW, LOAM, ETC), MUST BE SAMPLED AND EVALUATED BY THE ENVIRONMENTAL CONTRACTOR PRIOR TO DELIVERY TO THE SITE. IF THE SOIL IS DETERMINED BY THE ENVIRONMENTAL CONTRACTOR TO BE UNSUITABLE FOR SITE USE, CONTRACTOR IS RESPONSIBLE FOR IDENTIFICATION OF ALTERNATE SOURCE OF CLEAN SOIL AND ADDITIONAL SAMPLING LABOR AND LABORATORY COSTS ASSOCIATED WITH SAMPLING, ANALYSIS, AND DATA EVALUATION.



NOTES

- FINAL LOCATION TO BE DETERMINED BY CONTRACTOR BASED ON SITE CONDITIONS.
- KEEP AS FAR FROM DRAINAGE CHANNELS AND WETLAND AREAS AS PRACTICAL.
- SUMPS TO BE CLEANED AND WASTE CONCRETE REMOVED AND PROPERLY DISPOSED OF UPON COMPLETION OF WORK.

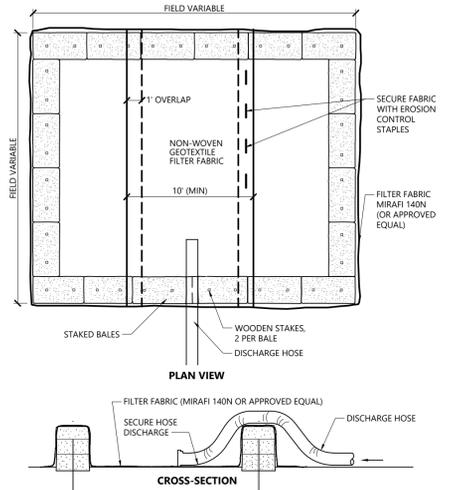
Concrete Washout	12/17
N.T.S.	LD_690
Source: VHB	



NOTES

- ENCLOSE STRUCTURE WITH HAYBALES IMMEDIATELY AFTER CATCH BASIN CONSTRUCTION. MAINTAIN UNTIL PAVING BINDER COURSE IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.
- IF GRATE IS AGAINST EXISTING CURB THEN BALES ARE TO BE PLACED AROUND THREE SIDES OF GRATE ONLY.
- GRATE TO BE PLACED OVER FILTER FABRIC.
- BALES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

Catch Basin Sediment Trap	1/16
N.T.S.	LD_673
Source: VHB	



NOTES

- NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
- THE BASIN TO BE SIZED TO PREVENT DISCHARGE WATER FROM OVERTOPPING BASIN.

Dewatering Straw Bale Basin	1/16
N.T.S.	LD_690
Source: VHB	



Municipal Parking Lot

50 Sims Avenue
Providence, Rhode Island

No.	Revision	Date	Apprd.

Designed by: _____ Checked by: _____
Issued for: _____ Date: _____

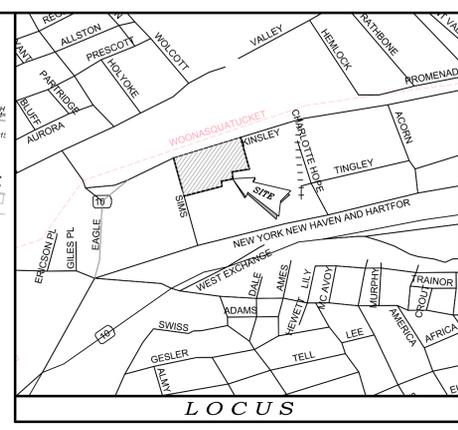
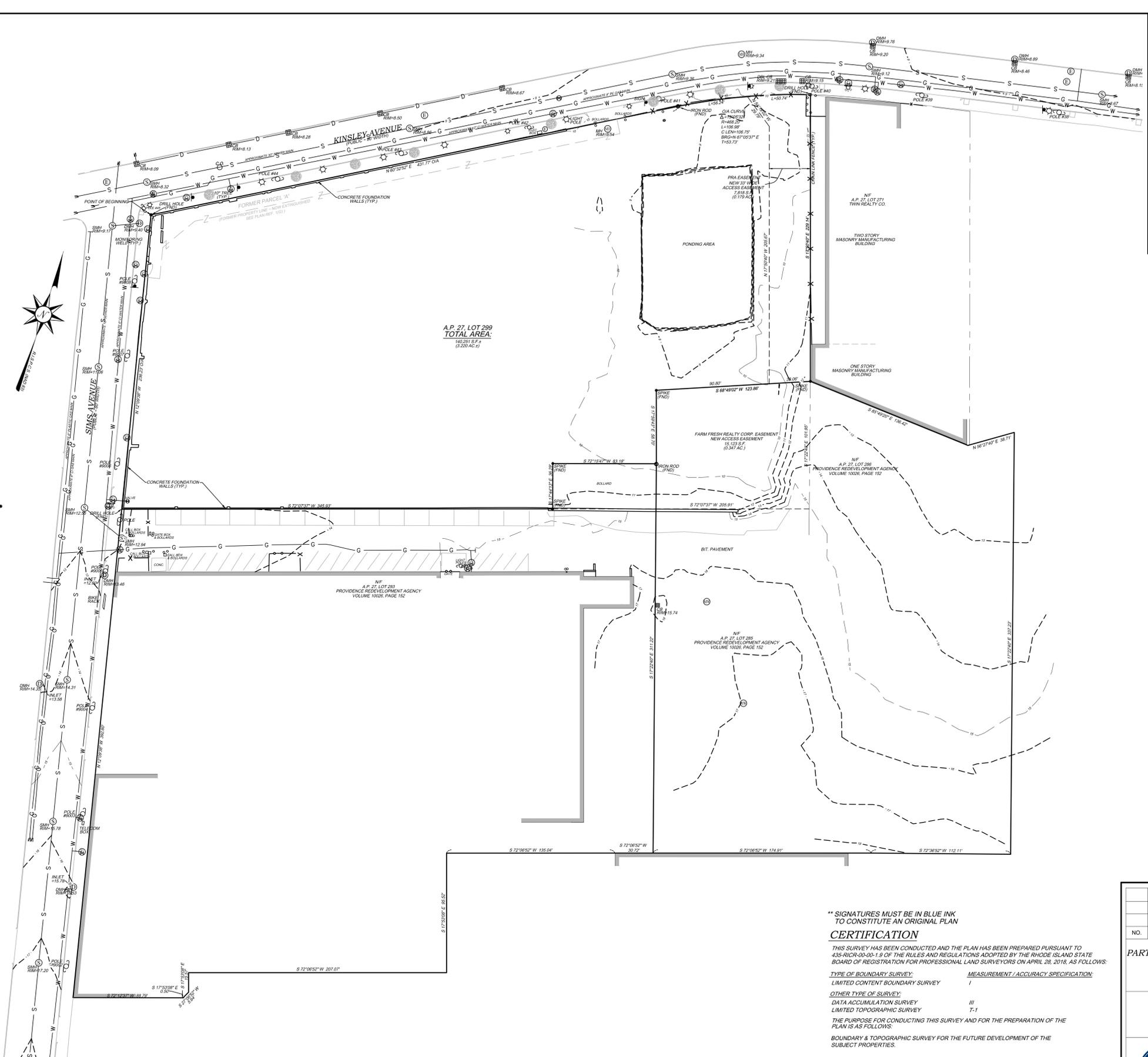
Permits/Bid July 24, 2020

Not Approved for Construction
Soil Erosion and Sediment Control- General Notes and Details

Drawing Number

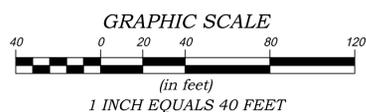
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Stabilized Construction Exit	1/16
N.T.S.	LD_682
Source: VHB	



LEGEND & ABBREVIATIONS

- | | | | |
|---------|----------------------------|-----|--------------------------|
| NF | - NOW OR FORMERLY | --- | - PROPERTY LINE |
| A.P. | - ASSESSORS PLAT | --- | - ZONING SETBACK LINE |
| S.F. | - SQUARE FEET | --- | - EXISTING CONTOUR |
| AC. | - ACRES | --- | - NEW CONTOUR |
| ± | - PLUS OR MINUS | --- | - STONE WALL |
| STY | - STORY | --- | - FENCE |
| WF | - WOOD FRAMED | --- | - SEWER LINE |
| SHP | - STATE HIGHWAY PLAT | --- | - DRAIN LINE |
| RET. | - RETAINING WALL | --- | - WATER LINE |
| PED. | - PEDESTRIAN | --- | - GAS LINE |
| (FND.) | - FOUND | --- | - ELECTRIC LINE |
| RHB | - RI HIGHWAY BOUND | --- | - SANITARY SEWER MANHOLE |
| PK NAIL | - MASONRY NAIL | --- | - CATCH BASIN |
| FE | - FLARED END | --- | - STORM DRAIN MANHOLE |
| RCP | - REINFORCED CONCRETE PIPE | --- | - WATER GATE |
| CLF | - CHAIN LINK FENCE | --- | - GAS VALVE |
| INV. | - INVERT | --- | - ELECTRIC MANHOLE |
| x 10.80 | - EXISTING SPOT GRADE | --- | - GRANITE BOUND |
| 10.80 | - NEW SPOT GRADE | --- | - DRILL HOLE |
| | | --- | - IRON PIPE |



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 WATERMAN ENGINEERING CO.
 CIVIL ENGINEERS & SURVEYORS
 46 SUTTON AVENUE
 EAST PROVIDENCE, RI 02914-2096

CERTIFICATION
 THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO 435-RICR-00-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON APRIL 28, 2018, AS FOLLOWS:
 TYPE OF BOUNDARY SURVEY: LIMITED CONTENT BOUNDARY SURVEY
 MEASUREMENT / ACCURACY SPECIFICATION: I
 OTHER TYPE OF SURVEY: DATA ACCUMULATION SURVEY III
 LIMITED TOPOGRAPHIC SURVEY T-1
 THE PURPOSE FOR CONDUCTING THIS SURVEY AND FOR THE PREPARATION OF THE PLAN IS AS FOLLOWS:
 BOUNDARY & TOPOGRAPHIC SURVEY FOR THE FUTURE DEVELOPMENT OF THE SUBJECT PROPERTIES.

BY: RICHARD S. LIPSITZ, P.L.S.
 REG. NO. 1837
 DATE 05/19/2020
 WATERMAN ENGINEERING COMPANY (COA No. LS.0004483)

DRAFT

NO.	DATE	REVISION	CHECKED BY
PARTIAL BOUNDARY & TOPOGRAPHIC SURVEY			PROJECT NO. 07-020
A.P. 27, LOTS 285, 293 & 299			SCALE 1" = 40'
KINSLEY AVENUE & SIMS AVENUE			DATE 05/18/2020
PROVIDENCE, RHODE ISLAND			DRAWN BY: EBP / BJT / RSL
VANASSE HANGEN BRUSTLIN, INC.			CHECKED BY: BJT / RSL
1 CEDAR STREET, SUITE 400			FILENAME: 07-020_SU1_2020
PROVIDENCE, RHODE ISLAND 02903			1 of 1 SHTS
			DRAWING # SU1

Waterman
 ENGINEERING & SURVEYORS
 Engineers & Surveyors - Est. 1894
 46 Sutton Avenue
 East Providence, RI
 Phone: (401) 438-5775
 Fax: (401) 438-5772
 www.watermanengineering.net

ISSUED FOR BID: JULY 24, 2020

Site Specifications

Municipal Parking Lot at 50 Sims Avenue
Providence, Rhode Island

PREPARED FOR

Providence Redevelopment Agency
444 Westminster Street, Suite 3A
Providence, Rhode Island 02903

PREPARED BY



1 Cedar Street, Suite 400
Providence, Rhode Island 02903
401.272.8100

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SECTION NO.	SECTION TITLE	LATEST REVISION
018900	Site Construction Performance Requirements	7/22/2020
033055	Cast-In-Place Concrete (Site)	7/22/2020
101455	Traffic and Regulatory Signage (Site)	7/22/2020
310000	Earthwork	7/22/2020
312319	Dewatering	7/22/2020
312500	Erosion and Sedimentation Controls	7/22/2020
311000	Site Clearing	7/22/2020
321610	Curbing	7/22/2020
321723	Pavement Markings	7/22/2020
329000	Planting	7/22/2020
329220	Seeding and Sodding	7/22/2020
334000	Storm Drainage Utilities	7/22/2020
334020	Warning and Tracer Tape	7/22/2020
347113	Vehicle Barriers	7/22/2020

APPENDIX NO.	APPENDIX TITLE
A	CAP Alteration and Soil Management Compliance Work Plan
B	Site Electrical and Site lighting specifications to be issued as an addendum

SECTION 018900
SITE CONSTRUCTION PERFORMANCE REQUIREMENTS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section specifies the general requirements for the site work included in the Contract.
- B. These requirements supplement those contained in the Standard General Conditions of the Construction Contract and their Supplemental Conditions.
- C. References are included in this Section to Articles of the General Conditions to call the Contractor's attention to frequently needed requirements.

1.02 PERMITS

- A. Unless otherwise provided in the Supplementary Conditions, the Contractor shall obtain and pay for all construction permits and licenses. The Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. The Contractor shall pay all charges and inspection fees necessary for the prosecution of the Work, and shall pay all charges of utility owners for connections to the Work.

1.03 LAWS AND REGULATIONS

- A. Contractor shall give all notices and comply with all laws and regulations applicable to furnishing and performance of the Work.
- B. If the Contractor performs any work that is contrary to laws or regulations, the Contractor shall bear all claims, costs, losses and damages caused by, arising out of or resulting therefrom.

1.04 UTILITIES

- A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing underground facilities (utilities) at or contiguous to the site is based on information and data furnished to Owner or Engineer by the owners of such underground facilities (utilities) or by others.
 - 1. The Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and
 - 2. The cost of all of the following will be included in the Contract and Contractor shall have full responsibility for: (i) reviewing and checking all such information and data; (ii) locating all underground facilities (utilities) shown or indicated in the Contract Documents; (iii) coordination of the Work with the owners of such underground facilities (utilities) during construction; and (iv) the safety and protection of all such underground facilities (utilities) and repairing any damage thereto resulting from the Work.
- B. Not Shown or Indicated: If an underground facility (utility) is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents, the

Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency), identify the owner of such underground facility (utility) and give written notice to that facility (utility) owner and to Owner and Engineer. Engineer will promptly review the underground facility (utility) and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence of the underground facility (utility). If the Engineer concludes that a change in the Contract Documents is required, revised plans and specifications will be issued to reflect and document such consequences. During such time, the Contractor shall be responsible for the safety and protection of such underground facility (utility).

- C. Contractor shall notify all municipal agencies and utility companies owning or operating utilities, of proposed work affecting the utilities, or agencies.
- D. Contractor shall give written notification within the time period required by the agency or company for advance notification. A copy of the notification shall be furnished to the Engineer.
- E. Contractor shall notify "DIG SAFE" before commencing any work in the vicinity of existing subsurface utilities.
- F. Contractor shall secure in-place existing utilities whose support is affected by the work and cooperate and assist the agency or company operating the utility in maintaining the utility services. Contractor shall correct any damage to the utilities caused by construction operations by repair or replacement, as required by the utility owner. When the repair or replacement is made by the utility owner, Contractor shall pay all costs assessed by the utility owner for the work.
- G. If the existing utilities are found to conflict with the proposed work, the Contractor shall protect and maintain the utilities and take measurements to determine the location, type and dimensions of the utility. The information shall be furnished to the Engineer who will determine the changes required in the proposed work or existing utilities to resolve the conflict as soon thereafter as is reasonable.
- H. Contractor shall verify the location, size, invert elevation and type of existing facilities at all points of connection prior to ordering new utility materials.

1.05 SOILS INFORMATION

- A. The soils data is furnished to Contractor for informational purposes only and are specifically not a part of these Contract Documents. The Owner does not guarantee that the information is representative of all soils, rock, and other materials that may be encountered on the site.
- B. Contractor may make additional subsurface explorations upon written request to, and upon approval by, the Owner at no additional cost to the Owner.

1.06 SOIL SUPPORT

- A. Contractor shall furnish and install excavation soil support devices or use soil strengthening techniques required to perform excavations in accordance with the current requirements of

the U.S. Department of Labor, Occupational Health & Safety Administration and all federal, state, and municipal laws and regulations.

1.07 REFERENCE STANDARDS

- A. References are made to technical societies, organizations and groups using the following abbreviations. All work so referred shall conform to the current edition of the referenced standard.

AASHTO	American Association of State Highway Transportation Officials
ACI	American Concrete Institute
ACOE	United States Army Corps of Engineers
AGC	Associated General Contractors of America
ANSI	American National Standards Institute
AOAC	Association of Official Agricultural Chemists
ASTM	American Society for Testing and Materials
AWPA	American Wood Preservers Association
AWWA	American Water Works Association
NEMA	National Electrical Manufacturers Association
NEWWA	New England Water Works Association
OSHA	Occupational Safety and Health Administration
UL	Underwriters Laboratory

1.08 TRAFFIC MAINTENANCE

- A. Contractor shall maintain access to the site and through the work zones for personnel and vehicles of emergency services, utility agencies, inspection services, and others authorized to enter, move about and work on the site.
- B. When work is required on public roadways, Contractor shall furnish, install, maintain, and remove all signs, drums, barricades, steel plates, and other devices required by the federal or state government or municipality to maintain and protect pedestrians and vehicular traffic.
- C. Protective measures shall be installed at site access points to prevent mud and other debris from being deposited on the public roadways by construction traffic. The public roadways shall be swept as required to remove any deposits.

1.09 STATE AND LOCAL REFERENCE STANDARDS

- A. Building Code Rhode Island State Building Code
- B. RIDEM Rhode Island Department of Environmental Management
- C. RIDOT Rhode Island Department of Transportation

END OF SECTION 018900

SECTION 033055
CAST-IN-PLACE CONCRETE (SITE)

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section specifies requirements for concrete cast-in-place on the site.
- B. The work includes cast-in-place concrete pavement, walkways bases, foundations, and structures..

1.02 RELATED SECTIONS

- A. Sections which directly relate to the work of this Section include:
 - 1. Section 310000 – EARTHWORK
 - 2. Section 321610 – CURBING

1.03 REFERENCE STANDARDS

- A. References herein are made in accordance with the following abbreviations and all work under this Section shall conform to the latest editions as applicable.
 - 1. American Concrete Institute (ACI):
 - 301 Specifications for Structural Concrete
 - 305R Hot Weather Concreting
 - 306R Cold Weather Concreting
 - 325.9R Guide for Construction of Concrete Pavements and Concrete Bases
 - 2. ASTM International (ASTM):
 - A82 Standard Specification for Steel Wire, Plain, for Concrete Reinforcement
 - A1064 Standard Specification for Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete
 - A615 Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
 - C31 Standard Practice for Making and Curing Concrete Test Specimens in the Field
 - C33 Standard Specification for Concrete Aggregates
 - C94 Standard Specification for Ready-Mixed Concrete
 - C143 Standard Test Method for Slump of Hydraulic-Cement Concrete
 - C150 Standard Specification for Portland Cement
 - C171 Standard Specification for Sheet Materials for Curing Concrete
 - C231 Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
 - C260 Standard Specification for Air-Entraining Admixtures for Concrete

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- C309 Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
- C494 Standard Specification for Chemical Admixtures for Concrete
- C1116 Standard Specification for Fiber-Reinforced Concrete

3. Concrete Reinforcing Steel Institute (CRSI):
Manual Manual of Standard Practice.
4. United States Department of Justice - Americans with Disabilities Act (ADA):
ADA ADA Accessibility Guidelines for Buildings and Facilities; 28 CFR Part 36.
5. State Regulations regarding Accessibility.

1.04 QUALITY ASSURANCE

- A. Work and materials for construction of the cement concrete walks shall conform to ACI 316R. Other cast-in-place concrete shall conform to ACI 301.
- B. Work, materials, and color of the wheelchair ramp paving shall conform to applicable sections of Americans with Disabilities Act (ADA) and State Standards, whichever is more stringent.
- C. Dimensions, locations, and details of equipment pads, anchors, supports, and similar features shown on the Drawings are approximate. Manufacturer's approved shop Drawings of equipment to be supported, anchored, or contained thereby shall be consulted for exact location, size, and details.

1.05 SUBMITTALS

- A. Submit description of methods and sequence of placement for each type of specially-finished concrete, including description of methods and sequence of placement.
- B. Submit manufacturer's product data for the following:
 1. Form release agent.
 2. Concrete coloring additive.
 3. Preformed joint filler.
 4. Concrete reinforcement specification data from manufacturer.
 5. Stamp and imprinting tools, manufacturer's literature.
 6. Manufacturer's literature for protective coating for sidewalks.
 7. Detectable Warning including manufacturer's certification that product complies with ADA.

1.06 TESTING

- A. The Owner may employ an independent testing laboratory to inspect and test concrete paving and other cast-in-place concrete work.
- B. When requested, Contractor shall prepare test specimens in accordance with ASTM C31, standard cylinder size 4-inch x 8 inch.

- C. Testing of materials and installed work may occur at any time during progress of the work. Rejected materials and installed work shall be removed and replaced.

PART 2 – PRODUCTS

2.01 STEEL REINFORCEMENT

- A. Steel reinforcing bars shall conform to ASTM A615, Grade 60, deformed.
 - 1. Bars employed as dowels shall be hot-rolled plain rounds.
- B. Steel Wire: ASTM A82, plain cold drawn steel.
- C. Welded Wire Reinforcement: Welded wire reinforcement shall conform to the applicable requirements of ASTM A1064. Fabric reinforcement shall be furnished in flat sheets. Fabric reinforcement in rolls will not be permitted.
- D. Supports for Reinforcement: Bolsters, chairs, and other devices for spacing, supporting, and fastening reinforcing bars, and welded wire fabric in place shall be wire bar-type supports complying with CRSI Manual.
 - 1. For slabs-on-grade, use supports with sand plates or horizontal runners where base material will not support chair legs.
 - 2. For exposed-to-view concrete surfaces where legs of supports are in contact with forms, provide supports with legs that are protected by plastic (CRSI Class 1).

2.02 PORTLAND CEMENT CONCRETE

- A. Portland cement concrete shall conform to the following:
 - 1. Maximum water-cement ratio shall be 0.45 conforming to ACI 316R.
 - 2. Concrete shall be air-entrained type conforming to ASTM C94. Air content by volume shall be 6 percent + 1.5 percent, tested in accordance with ASTM C260.
 - 3. Slump of concrete shall not be less than 3 inches nor greater than 4 inches, determined in accordance with ASTM C143.
 - 4. Cement for concrete shall be a Portland cement conforming to ASTM C150, Type I or II. Only one color of cement, all by the same manufacturer, shall be used for the work.
 - 5. Fine and coarse aggregates for concrete shall conform to ASTM C33.
 - 6. Concrete shall contain a water reducing agent to minimize cement and water content of the concrete mix at the specified slump. Water reducing agent shall conform to ASTM C494, Type A.
 - 7. Concrete shall contain no calcium chloride or admixtures containing calcium chloride. No admixtures other than those specified shall be used in the concrete without the specific written permission of the Engineer.

2.03 CONCRETE AGGREGATES

- A. Fine Aggregates: Fine aggregates shall conform to ASTM C33, part 6.

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- B. Coarse Aggregates: Coarse aggregates shall conform to ASTM C33, Parts 9 through 11 and Tables 2 and 3, with the following Class designations:
 - 1. Class 1S: For footings and foundations not exposed to the weather.
 - 2. Class 4S: For pavements, driveways, curbs, walkways, sidewalks, and retaining walls that are exposed to the weather.
 - 3. Class 1N: For pavements, driveways, curbs, walkways, sidewalks, and retaining walls that are not exposed to the weather.
- C. Exposed Aggregate: Exposed aggregate for ADA curb ramps shall be selected, hard, durable, washed rounded stones free of deleterious reactivity to cement with graded sizes between 1/2 to 3/4-inch diameter nominal sieves.

2.04 COLORED CONCRETE

- A. Color hardener and curing compound shall be manufactured and supplied by the Bomanite Corporation, 81 Encina Avenue, Palo Alto, CA 94301; tel. 800-854-2094, or approved equivalent.
 - 1. Color for concrete shall have visual contrast with surrounding paving.
 - 2. Curing compound shall be liquid applied.

2.05 CURING MATERIALS FOR UNCOLORED CONCRETE

- A. Curing shall be accomplished by the following methods:
 - 1. Moist curing with burlap covering.
 - 2. Curing paper, non-staining, fiber reinforced laminated Kraft bituminous product conforming to ASTM C171. Four mil polyethylene sheeting may be substituted for curing paper.
 - 3. Curing compound, a resin-base, white pigmented compound conforming to ASTM C309, Type 2.

2.06 EXPANSION JOINTS

- A. Expansion joint filler shall be preformed, non-bituminous type conforming to ASTM D1752, Type II, similar to Sealtight Cork Expansion Joint Filler, manufactured by W.R. Meadows, Inc., Elgin, IL 60120, or approved equivalent.
 - 1. Pre-molded filler shall be one piece for the full depth and width of the joint.
- B. Smooth dowel shall be hot rolled plain steel dowel bonded at one end and operating in smooth close-fitting sleeve (of same material) at the other end.

2.07 CONTROL JOINTS

- A. Joint filler to be polyethylene foam with manufacturer's recommended sealant.

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2.08 FORMS

- A. Cylindrical Forms: Sonotube Fibre Forms, wax-impregnated strippable forms manufactured by Sonoco Products Company, General Products Division, ABS or PVC plastic reusable forms, or approved equivalent.
- B. Forms for Exposed Finish: Plywood, metal, metal-framed plywood faced, or other acceptable panel materials. Plywood shall conform to U.S. Product Standard PS-1 and APA Graded B-B (Concrete Form) Class I Exterior Grade plywood or B-B or A-C Class I high density overlay concrete form plywood. Formwork materials shall produce smooth, continuous, straight and level surfaces.
- C. Forms for Unexposed Finish: Plywood, lumber, or metal, with lumber dressed on at least two edges and one side.
- D. Form Ties: Prefabricated, adjustable length galvanized steel snap-off ties, with brackets, cones, cornerlocks, and other accessories as necessary.
- E. Form Release Agent: Commercial formulation compounds that will not bond with, stain or adversely affect concrete.
- F. Imprinting Tools: Mats and tools used to stamp projecting texture and patterns onto plastic concrete surfaces and which shall be specifically designed with rigid back supports to enable a clean, sharp, stamping image. Stamps for curb ramps shall be designed to meet ADA detectable warning requirements.

2.09 FIBROUS REINFORCING

- A. Material shall meet ASTM C1116 and shall be as manufactured by NyCon Incorporated, or approved equal.
- B. Mix fibrous reinforcement in accordance with manufacturer's instructions including product data and technical bulletins.
 - 1. Add fibrous reinforcement to concrete mix at the concrete batch facility.
 - 2. Adding and mixing fibrous reinforcement at the job site will not be allowed.
- C. Provide job mix design data to show concrete mix will attain specified strength requirements.

2.10 EXPOSED CONCRETE PROTECTIVE COATING

- A. Surface sealer shall be silane-siloxane non-yellowing type which breathes water vapor, Saltguard WB by ProSoCo or approved equivalent.

2.11 DETECTABLE WARNINGS

- A. Detectable warnings shall meet ADA and State Standards, whichever is more stringent, and shall be ADA Solutions Cast-in-Place Replaceable Tactile Warning Surface Tiles Federal Yellow (or approved equal).

PART 3 – EXECUTION

3.01 PREPARATION OF SUBGRADE

- A. The subgrade of areas to be paved shall be graded and compacted as specified in Section 301 of the Rhode Island Department of Transportation Standard Specifications.
- B. Excavation required in pavement subgrade shall be completed before fine grading and final compaction of subgrade are performed. Where excavation must be performed in completed subgrade, subbase, base, or pavement, subsequent backfill and compaction shall be performed as required by the Engineer and as specified in Section 310000, EARTHWORK.
- C. Materials shall not be stored or stockpiled on subgrade.
- D. Prepared subgrade will be inspected by the Engineer. Subgrade shall be approved for installation of the gravel base course. Disturbance to subgrade caused by inspection procedures shall be repaired.

3.02 BASE COURSE

- A. Base course for concrete paving shall be pavement subbase course or gravel base materials specified in 301 of the Rhode Island Department of Transportation Standard Specifications as shown on the Drawings.
- B. Width of base course shall extend beyond edge of the proposed pavement as shown on the Drawings.
- C. Material shall be placed in lifts no more than 6 inches thick, compacted measure. Each lift shall be separately compacted to specified density.
 - 1. Material shall be placed adjacent to wall, manhole, catch basin, and other structures only after they have been set to required grade.
 - 2. Rolling shall begin at sides and progress to center of crowned areas, and shall begin on low side and progress toward high side of sloped areas. Rolling shall continue until material does not creep or wave ahead of roller wheels.
 - 3. Surface irregularities which exceed 1/2 inch as measured by means of a 10-foot-long straightedge shall be regraded and recompacted.
- D. Base course shall be compacted at optimum moisture content to not less than 95 percent of maximum density as determined by ASTM D1557.
- E. The base course shall be kept clean and uncontaminated. Less select materials shall not be permitted to become mixed with the base course material.

3.03 STEEL REINFORCEMENT

- A. Before being placed in position, reinforcing steel shall be thoroughly cleaned of loose mill and rust scale, dirt, ice, and other foreign material which may reduce the bond between the concrete and reinforcing. Where there is delay in placing concrete after reinforcement is in place, bars shall be re-inspected and cleaned when required.
- B. Any bar showing cracks after bending shall be discarded.

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- C. Unless otherwise shown on the Drawings, reinforcing shall extend within 2 inches of formwork and expansion joints. Reinforcing shall continue through control joints. Adjacent sheets of fabric reinforcing shall lap 6 inches.
- D. After forms have been coated with form release agent, but before concrete is placed, reinforcing steel shall be securely wired in the required position and shall be maintained in that position until concrete is placed and compacted. Chair bars and supports shall be installed in a number and arrangement approved by the Engineer.

3.04 FORMS

- A. General: Design, erect, support, brace, and maintain formwork to support vertical, lateral, static, and dynamic loads that might be applied until concrete structure can support such loads. Construct formwork so concrete members and structures are of correct size, shape, alignment, elevation, and position. Maintain formwork construction tolerances and surface irregularities complying with the following ACI 347 limits.
 - 1. Provide Class A tolerances for concrete surfaces exposed to view.
 - 2. Provide Class C tolerances for other concrete surfaces.
- B. Construct forms to provide for openings, offsets, sinkages, keyways, recesses, moldings, chamfers, blocking, screeds, bulkheads, anchorages, and inserts, and other features required for the work. Use selected materials to obtain required finishes. Solidly butt joints and provide back-up at joints to prevent cement paste from leaking.
- C. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Kerf wood inserts for forming keyways, reglets, recesses, and other features for easy removal.
- D. Chamfer exposed corners and edges, using wood, metal, PVC, or rubber chamfer strips fabricated to produce uniform smooth lines and tight edge joints.
- E. Thoroughly clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, or other debris just before placing concrete. Re-tighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.

3.05 INSTALLING EMBEDDED ITEMS

- A. General: Set and build into formwork the anchorage devices and other embedded items required for work that is attached to, or supported by, cast-in-place concrete. Use setting drawings, diagrams, instructions, and directions provided by suppliers of items to be attached.
- B. Forms for Slabs: Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and contours in finished surfaces. Provide and secure units to support screed strips using strike-off templates or compacting-type screeds.

3.06 PREPARING FORM SURFACES

- A. Coat contact surfaces of forms with an approved, nonresidual, low-VOC form-coating compound before placing reinforcement.

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3.07 CONCRETE PLACING

- A. Equipment, methods of mixing and placing, and precautions to be observed as to weather, and condition of base shall meet the requirements of ACI 316R.
- B. The Engineer shall be notified of scheduled concrete placement sufficiently in advance of start of operation to allow preliminary inspection of the work, including subgrade, forms, and reinforcing steel.
- C. Work shall not be performed during rainy weather or when temperature is less than 40°F. (4.4°C.).
- D. Adjacent work shall be protected from stain and damage. Damaged and stained areas shall be replaced or repaired to equal their original conditions.
- E. Existing concrete, earth, and other water-permeable material against which new concrete is to be placed shall be thoroughly damp when concrete is placed. There shall be no free water on surface.
- F. Concrete which has set or partially set, before placing shall not be used. Retempering of concrete will not be permitted.
- G. Concrete shall be thoroughly vibrated, or otherwise consolidated to secure a solid and homogeneous mass, thoroughly worked around reinforcement and into corners of forms.
- H. When joining fresh concrete to concrete which has attained full set, latter shall be cleaned of foreign matter, and mortar laitance shall be removed by chipping and washing. Clean, roughened base surface shall be saturated with water, but shall have no free water on surface. A coat of 1:1 cement-sand grout, approximately 1/8 inch thick, shall be well scrubbed into the thoroughly dampened concrete base. New concrete shall be placed immediately, before grout has dried or set.

3.08 FINISHING

- A. Concrete surfaces shall be screeded and finished true to line and grade, and free of hollows and bumps. Surface shall be dense and smooth.
 - 1. Finished concrete surface for concrete subbases shall be wood floated to a slightly rough surface. Surface shall not deviate more than 1/4 inch in 10 feet.
 - 2. Finished concrete surfaces shall be wood floated and steel troweled, or broom finished, to a uniform surface. Surface shall not deviate more than 1/8 inch in 10 feet.
- B. Horizontal surfaces of concrete surfaces which will be exposed shall be given a light broomed finish, with direction of grooves in concrete surface perpendicular to length of concrete band, slab, or pad. After concrete has set sufficiently to prevent coarse aggregate from being torn from surface, but before it has completely set, brooms shall be drawn across the surface to produce a pattern of small parallel grooves. Broomed surface shall be uniform, with no smooth, unduly rough or porous spots, or other irregularities. Coarse aggregate shall not be dislodged by brooming operation.
- C. Immediately following finishing operations, arises at edges and both sides of expansion joints shall be rounded to a 1/4- inch radius. Control joints to be tooled shall be scored into

slab surface with scoring tool. Adjacent edges of control joint shall at same time be finished to a 1/4-inch radius.

- D. Where finishing is performed before end of curing period, concrete shall not be permitted to dry out, and shall be kept continuously moist from time of placing until end of curing period, or until curing membrane is applied.
- E. Sidewalks, walkways, accessible routes, and ramps shall be constructed and finished in accordance with the Americans with Disabilities Act (ADA) and state and local requirements. Provide protective coating in accordance with manufacturer's recommendations.
- F. Exposed Aggregate Finish: Expose coarse aggregate in pavement surfaces as follows:
 - 1. Immediately after float finishing, spray-apply chemical surface retarder to pavement according to manufacturer's written instructions.
 - 2. Cover pavement surface with plastic sheeting, sealing laps with tape, and remove when ready to continue finishing operations.
 - 3. Without dislodging aggregate, remove excess mortar by lightly brushing surface with a stiff, nylon-bristle broom.
 - 4. Fine-spray surface with water and brush. Repeat water flushing and brushing cycle until cement film is removed from aggregate surfaces to depth required.

3.09 STAMPING

- A. Mat Stamping: While initially finished concrete is plastic accurately align and place stamp mats in sequence. Uniformly load mats and press into concrete to produce requirement imprint pattern and depth of imprint on concrete surface. Remove stamp mats immediately. Hand stamp edges and surfaces unable to be imprinted using stamp mats.
- B. Tool Stamping: While initially finished concrete is plastic, cover surface with polyethylene film, stretch taut to remove wrinkles, lap sides and ends 3 inches (75 mm), and secure to edge forms. Lightly broom surface to remove air bubbles. Accurately align and place stamp tools in sequence and tamp into concrete to produce required imprint pattern and depth of imprint on concrete surface. Remove stamp tools immediately. Hand stamp edges and surfaces unable to be imprinted by stamp tools. Unroll and remove polyethylene film immediately after tool stamping.

3.10 CURING

- A. Concrete shall be kept continuously damp from time of placement until end of specified curing period or cured by other methods. Water shall not be added to surface during floating and troweling operations, and not earlier than 24 hours after concrete placement. Between finishing operations, surface shall be protected from rapid drying by a covering of waterproofing paper. Surface shall be damp when the covering is placed over it, and shall be kept damp by means of a fog spray of water, applied as often as necessary to prevent drying, but not sooner than 24 hours after placing concrete. None of the water so applied shall be troweled or floated into surface.
- B. Concrete surfaces shall be cured by completely covering with curing paper or application of a curing compound.

1. Concrete cured using waterproof paper shall be completely covered with paper with seams lapped and sealed with tape. Concrete surface shall not be allowed to become moistened between 24 and 36 hours after placing concrete. During curing period, concrete surface shall be checked frequently, and sprayed with water as often as necessary to prevent drying, but not earlier than 24 hours after placing concrete.
 2. Concrete cured with a curing compound shall have the compound applied at a rate of 200 square feet per gallon, in two applications perpendicular to each other.
 3. Curing period shall be seven (7) days minimum.
- C. Only if additional protection is absolutely required, the surface should remain uncovered after the seven (7) day period for at least four (4) days, after which time new and unwrinkled non-staining reinforced waterproof Kraft curing paper may be used.

3.11 EXPANSION JOINTS

- A. Expansion joints shall be 1/2-inch-wide and located to provide a maximum spacing of 50 feet between joints or where shown on the Drawings. Expansion joints shall be troweled in the concrete to required width with preformed joint filler in place. Joint filler shall extend the full depth of the slab and full length of the expansion joint.
1. For concrete walks, pavements, and pads, depth of joint filler shall be placed to form a 1-1/4 inch deep recess for sealant and backer rod below finished concrete surface.
 2. Use of multiple pieces to make up required depth and width of joint will not be permitted.

3.12 CONSTRUCTION JOINTS

- A. Construction joints shall be placed whenever placing of concrete is suspended for more than 30 minutes.
1. Butt joint with dowels or use a thickened edge joint if construction joints occur at control joint locations.
 2. Keyed joints with tie-bars shall be used if the joint occurs at any other location.

3.13 CONTROL JOINTS

- A. Control joints shall be tooled into the concrete slab, with 3-inch wide border and troweled edges, in pattern as shown on the Drawings. If no pattern is shown, then pattern shall result in square shape with a maximum area of 36 square feet. Joints shall be made after concrete is finished and when the surface is stiff enough to support the weight of workmen without damage to the slab, but before slab has achieved its final set.
- B. Scoring shall cut into slab surface at least 1 inch, but in no case not less than 25 percent of slab depth.

3.14 PROTECTIVE COATING

- A. Sealant shall be applied per manufacturer's recommendations

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3.15 COLD WEATHER CONCRETING

- A. Materials for concrete shall be heated when concrete is mixed, placed, or cured when the mean daily temperature is below 40°F. or is expected to fall to below 40°F. within 72 hours. The concrete, after placing, shall be protected by covering, heat, or both.
- B. Details of handling and protecting of concrete during freezing weather shall be subject to the approval and direction of the Engineer. Procedures shall be in accordance with provisions of ACI 306R.

3.16 HOT WEATHER CONCRETING

- A. Concrete just placed shall be protected from the direct rays of the sun and the forms and reinforcement just prior to placing shall be sprinkled with cold water. Every effort shall be made to minimize delays which will result in excessive mixing of the concrete after its arrival on-site.
- B. During periods of excessively hot weather (95°F., or above), ingredients in the concrete shall be cooled with cold mixing water to maintain the temperature of the concrete at permissible levels in accordance with the provisions of ACI 305R. Any concrete with a temperature above 95°F., when ready for placement, will be rejected.
- C. Temperature records shall be maintained throughout the period of hot weather giving air temperature, general weather conditions (calm, windy, clear, cloudy, etc.) and relative humidity. Records shall include checks on temperature of concrete when delivered to Project site and after placing in forms. Data should be correlated with the progress of the work so that conditions surrounding the construction of any part of the structure can be ascertained.

3.17 PROTECTION OF CONCRETE SURFACES

- A. Concrete surfaces shall be protected from traffic or damage until surfaces have hardened sufficiently.

3.18 DETECTABLE WARNINGS

- B. Detectable warnings shall be installed at locations as shown on plans and per manufacturer's recommendations.

END OF SECTION 033055

SECTION 101455
 TRAFFIC AND REGULATORY SIGNAGE (SITE)

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section specifies requirements for site traffic and regulatory signs and supports.
- B. The work includes:
 - 1. the furnishing and installation of new signs and sign supports.
 - 2. The removal of existing signs.
 - 3. New signs and sign supports in public roadways under the jurisdiction of the State Of Rhode Island Department Of Transportation (RIDOT) or municipality. The signs and supports shall conform to the requirements of the latest edition of the RIDOT Standard Specifications for Road And Bridge Construction.

1.02 SUBMITTALS

- A. Shop Drawings:
 - 1. Shop Drawings of all signs and supports. Do not order material or begin fabrication until Engineer's approval has been obtained.
 - 2. Show sizes and thicknesses of all members, types of materials, methods of construction and assembly, type of surface treatment, complete dimensions, hangers, brackets, anchorage, fasteners, relationship to surrounding work by other trades, shop finishes, sign designs, layouts, and lettering, and other pertinent details of fabrication and installation.

1.03 QUALITY ASSURANCE

- A. The manufacturer shall have experience in the type of work required and a reputation for producing satisfactory work on time.
- B. Deliver and store in a manner that prevents cracking, chipping, stress of the components, and damage.

PART 2 – PRODUCTS

2.01 ALUMINUM SIGN PANELS

- A. Aluminum Sign Panel: Fabricated from flat aluminum sheeting, ASTM B209, Alloy 6061-T6 or Alloy 5052-H38, of the following thickness and mounting, unless otherwise specified:

Area of Sign (square feet)	Mounting	Thickness (Inches)
Less than or equal to 10	Single Post	0.080
Between 10 and 20	Two Posts	0.080
Between 6 and 25	Single Post (Top Mounted)	0.250

- B. Sign supporting hardware shall be aluminum or stainless steel.

2.02 REFLECTIVE SHEETING

- A. Reflective sheeting shall meet the requirements of AASHTO M 268.
 - 1. Panel sheeting shall be Type II (Engineering Grade).
 - 2. Legend sheeting shall be Type III (High Intensity).
- B. Reflective sheeting shall be applied to properly treated base panels with mechanical equipment in a manner specified for the manufacture of traffic control signs by the sheeting manufacturer. Heat activated adhesive coating sheeting shall be pre-perforated.
 - 1. No splices shall be allowed on sign panels.
- C. When pressure sensitive adhesive coating reflective sheeting is used all sheeting splices and sign edges shall be sealed with materials recommended by and in a manner specified by the sheeting manufacturer.
 - 1. Dry heat activated adhesive coated reflective sheeting when applied to aluminum shall be edge sealed as specified by the sheeting manufacturer.
- D. Reflective sheeting shall be applied to properly treated base panels with mechanical equipment in a manner specified by the sheeting manufacturer.
- E. The numerals shall be black, die-cut, pre-spaced, conforming to the detail on the Drawings. Numerals shall have a pre-coated, pressure-activated adhesive applied as recommended by the manufacturer of the reflective sheeting or be opaque black permanent inks applied on approved high intensity sheeting.
- F. Treatment of Aluminum Sign Panels Prior to Application of Reflective Sheeting.
 - 1. Degreasing:
 - a. Vapor degreasing: By total immersion of the panel in a saturated vapor or trichloroethylene. Trademark printing shall be removed with lacquer thinner or controlled alkaline cleaning system.
 - b. Alkaline degreasing: By total immersion of the panel in a tank containing alkaline solutions, controlled and titrated to the solution manufacturer's specification.
 - 2. Rinsing: After satisfactory degreasing, the panels shall be thoroughly washed with running water.
 - 3. Drying: The panel shall be thoroughly dried by use of a forced hot air dryer.
 - 4. Metal shall not be handled between cleaning and etching operation and the application of reflective sheeting, except with devices or clean canvas gloves.
 - 5. Metal shall not come in contact with greases, oils, or other contaminants prior to the application of reflective sheeting.

2.03 LEGENDS

- A. Permanently Applied Legends:
 - 1. Permanently applied legends shall be reflective or opaque sheeting applied directly to clean, dust-free background in a manner specified by the sheeting manufacturer.

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2. Heat activated adhesive-coated material shall be applied only by mechanical means.
 3. Finishes shall be as recommended by and applied in the manner specified by the sheeting manufacturer.
 4. Legends shall be neatly cut.
- B. Silk Screen Processed:
1. The legends shall be of the series and size specified in the AASHTO Manual for "Signing and Pavement Markings" (current edition), and the dimension and details of the letters in to each series shall be as specified in the U.S. Department of Transportation FHWA publication "Standard Alphabets for Highway Signs and Pavement Markings" (current edition), or as shown on the Drawings.

2.04 FASTENERS AND ANCHORS

- A. The sign fabricator shall design a complete system of fastenings and anchorage devices for the various signs, as required for attachment to the various supporting structures. These may include concealed clip systems, face screws and epoxy adhesives. Wherever reasonably possible, fastenings and anchorage devices shall be fully concealed and shall be vandal proof. The Contractor shall provide safe and secure installations in strict conformance to the governing laws and building code.

2.05 SIGN SUPPORTS

- A. Sign supports shall conform to Section M.16.04.5 of the RIDOT Standard Specifications for Road and Bridge Construction latest edition, unless otherwise shown on the plans.

PART 3 – EXECUTION

3.01 PROTECTION AND TEMPORARY COVERS

- A. Completed sign panels shall be protected and maintained in good condition, free from dirt, scratches, hand marks or other blemishes. The panels shall be transported in a manner that prevents damage.
- B. Subsequent to erection, if required by the Engineer, exterior signs shall be covered until the actual use is desired. Material used to temporarily cover any sign panel shall effectively conceal the message, be non-injurious to the panel, its finish, its structural integrity, and shall be of sufficient durability for the time period required.

3.02 INSTALLATION

- A. Erection of all signs shall be performed by experienced sign erectors. Signs shall be installed true, plumb, and level, located where shown on the Drawings or as required by the Engineer. No field cutting of any sign work will be allowed. Exercise extreme care in all handling and stacking of signs to avoid chipping.
- B. All work shall be rigidly anchored to the supporting construction in accordance with the approved shop drawings.

3.03 CLEAN-UP

- A. Surfaces of signs shall be cleaned as recommended by the sign manufacturer after installation.
- B. All defective work shall be removed and replaced with work conforming to the specified requirements.

3.04 ERECTION OF POSTS

- A. Posts shall be supported in a concrete base as detailed in the drawings.
- B. Posts specifically indicated on the drawings to be driven, shall be driven a minimum of three feet into firm ground.
- C. The height of signs above ground surfaces shall meet Americans with Disabilities Act (ADA) requirements.

END OF SECTION 101455

SECTION 310000
EARTHWORK

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Provide facilities, labor, materials, tools, equipment, appliances, transportation, supervision, and related work necessary to complete the work specified in this section, and as shown on the Drawings.
- B. Work performed under this Section of the Specifications shall be subject to the General Conditions, Supplementary Conditions and Division 01 General Requirements of the Contract Documents.
- C. The work of this section includes but is not necessarily limited to:
 - 1. Excavation, fill, and backfill, as indicated or required, including compaction.
 - 2. Excavation, as required, to the lines and grades indicated on the Drawings.
 - 3. Excavation and offsite disposal of unsuitable or excess materials unless on-site locations are designated. Excavation shall include removal and satisfactory disposal of all unclassified material encountered throughout the site.
 - 4. Rough grading, including placement, moisture conditioning, and compaction of fills and backfill.
 - 5. Placement of base and subbase course materials under structures, pavements, slabs, and footings, including compaction.
 - 6. Trench excavation, bedding, and backfill for structures, foundations, and utilities, including compaction.
 - 7. The removal, hauling and stockpiling of suitable excavated materials for subsequent use in the work. Stockpiling shall include protection to maintain materials in a workable condition.
 - 8. Rehandling, hauling, and placing of stockpiled materials for use in refilling, filling, backfilling, grading, and such other operations.
 - 9. Protection and preservation of all existing buildings, pavements, and utilities to remain.
 - 10. Furnishing and installing all sheeting, shoring, and bracing of structural and trench excavations and its satisfactory removal, unless otherwise directed to have it remain in place.
 - 11. Environmental controls.
 - 12. Providing products in sufficient quantities to meet the project requirements.
 - 13. Providing adequate pumping and drainage facilities to keep the work area sufficiently dry.
 - 14. Obtaining all required permits, licenses, and approvals from appropriate municipal and utility authorities, prior to commencement of the work of this Section, and paying costs incurred therefrom.
- D. Provision of facilities, labor, materials, tools, equipment, appliances, and related work necessary to provide and maintain erosion control during construction operations. All erosion control measures shall be installed prior to earthwork operations and shall be maintained according to plans and other sections of the specifications.

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1. Refer to Section 312500 – EROSION AND SEDIMENTATION CONTROLS

- E. Contractor shall be responsible for notifying all affected utility companies before starting work. Comply with the requirements of the "Dig Safe" Utilities Underground Damage Prevention System.

1.02 RELATED SECTIONS

- A. Carefully examine the Contract Documents for requirements which affect the work in this Section. Other Specification Sections which directly relate to the work of this Section include, but are not limited to, the following:

1. Section 018900 – SITE CONSTRUCTION PERFORMANCE REQUIREMENTS
2. Section 311000 – SITE CLEARING
3. Section 312319 – DEWATERING
4. Section 312500 – EROSION AND SEDIMENTATION CONTROLS
5. Section 329000 – PLANTING
6. Section 329220 – SEEDING AND SODDING
7. Section 334000 – STORM DRAINAGE UTILITIES

1.03 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 Association of State Highway and Transportation Officials (AASHTO):
 - a. T11 – Standard Method of Test for Materials Finer Than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing
2. ASTM International (ASTM):
 - a. D422 (2007) Standard Test Method for Particle-Size Analysis of Soils
 - b. D1557-12 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
 - c. D5268-10 Standard Specification for Topsoil Used for Landscaping Purposes
3. American Concrete Institute (ACI):
 - a. 229R-13 Report on Controlled Low-Strength Materials

- B. Rhode Island Department of Transportation Standard Specifications For Road and Bridge Construction – latest edition (RIDOT Standard Specification)

1.04 LAWS AND REGULATIONS

- A. Work shall be accomplished in accordance with regulations of local, county, state and federal agencies or utility company standards as they apply.

1.05 QUALITY ASSURANCE

- A. The Owner may retain and pay for the services of an independent testing and inspection firm and/or a Geotechnical Consultant to perform on-site observation and testing during

the various phases of the construction operations. The scope of services will be determined by the Owner and the independent testing and inspection firm and/or the Geotechnical Consultant, and results will be provided to the Contractor. The Owner reserves the right to modify or waive the services of the independent testing and inspection firm and/or the Geotechnical Consultant. The services of an independent testing firm and/or Geotechnical Consultant may include, but not necessarily be limited to, the following:

1. Observation during excavation and dewatering of building areas and controlled fill areas.
 2. Laboratory testing and analysis of fill materials as specified herein and proposed by the Contractor for incorporation into the Work.
 3. Observation of construction and performance of water content, gradation and compaction tests at a frequency and locations that the independent testing and inspection firm and/or the Geotechnical Consultant may require. The results of these tests will be submitted to the Owner, Engineer, and Contractor on a timely basis so that action can be taken to remedy indicated deficiencies. During the course of construction, the independent testing and inspection firm and/or the Geotechnical Consultant will advise the Owner in writing, if at any time in their opinion, the Work hereunder is of unacceptable quality. Failure of independent testing and inspection firm and/or the Geotechnical Consultant to give notice, shall not excuse the Contractor from latent defects discovered in his work.
- B. The Contractor shall make provisions for allowing observations and testing of Contractor's work by the independent testing and inspection firm and/or the Geotechnical Consultant.
1. The presence of the independent testing and inspection firm and/or the Geotechnical Consultant does not include supervision or direction of the actual work of the Contractor, and his employees or agents. Neither the presence of the independent testing and inspection firm and /or the Geotechnical Consultant, nor any observations and testing performed by them, nor failure to give notice of defects shall excuse the Contractor from defects discovered in his work.
- C. Costs related to retesting due to unacceptable qualities of work and failures discovered by testing shall be paid for by the Contractor at no additional expense to Owner, and the costs thereof will be deducted by the Owner from the Contract Sum.

1.06 SUBMITTALS

- A. Submit, in an airtight container for the testing laboratory, a 50-pound sample of each type of off-site fill material that is to be used at the site. Submit samples a minimum of one week prior to use of proposed material at the site. Submit samples to the testing laboratory and/or the Geotechnical Consultant (copy of these transmittal forms shall be simultaneously sent to Engineer) or if no testing laboratory and/or Geotechnical Consultant is identified, then the Engineer shall be the recipient of the samples. Use of these proposed materials by the Contractor prior to testing and approval shall be at the Contractor's risk.
- B. The Engineer will determine the suitability of all materials.
- C. Submit the name of each material supplier and specific type and source of each material. Any change in source throughout the project will require approval of the Owner or Engineer.

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- D. For use of geotextile fabrics or geogrids, submit manufacturer's product data including material properties for approval by the Engineer.

1.07 COORDINATION

- A. Prior to start of earthwork the Contractor shall arrange an on-site meeting with the Engineer, the Owner's Representative, the independent testing firm, and/or the Geotechnical Consultant for the purpose of establishing the Contractor's schedule of operations and scheduling observation and testing procedures and requirements.
- B. As construction proceeds, the Contractor shall be responsible for notifying the Owner and Engineer prior to the start of earthwork operations requiring observation and/or testing.

1.08 SUBSURFACE SOIL DATA

- A. There are known contaminated soils on the site. A CAP Alteration and Soil Management Compliance Work Plan has been prepared and submitted to RIDEM for their approval. A copy of the plan is included in Appendix A of these specifications. The Contractor is responsible to follow the approved CAP Alteration and Soil Management Compliance Work Plan.
- B. The soils data is furnished to Contractor for informational purposes only and are specifically not a part of these Contract Documents. The Owner does not guarantee that the information is representative of all soils, rock, and other materials that may be encountered on the site.
- C. Review available logs of borings, test pit logs, jar soil samples, records of explorations and other pertinent data for the site. After obtaining Owner's permission, take whatever additional subsurface explorations deemed necessary at no expense to the Owner.
- D. Subsurface soil data is provided for general information and is accurate only at the particular locations and times the subsurface explorations were made. It is the Contractor's responsibility to make interpretations and to draw conclusions based on the character of materials to be encountered and the impact on his work based on his expert knowledge of the area and of earthwork techniques.

PART 2 – PRODUCTS

2.01 SUBGRADE

- A. Subgrade is the material in excavation (cuts) and fills located below subbase, base course layer for slabs, sidewalks, pavement, and other improvements.

2.02 COMMON FILL / ORDINARY BORROW

- A. Common Fill/Ordinary Borrow shall be friable soil containing no stone greater than two-thirds (2/3) the loose lift thickness with a maximum stone size of twelve (12) inches in diameter. The material shall be essentially free of trash, ice snow, tree stumps, roots, and organic materials. The soil shall contain no more than 15 percent passing the #200 sieve.

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2.03 GRAVEL

- A. Gravel shall consist of inert material that is hard, durable stone and coarse sand, free from loam, clay, surface coatings and deleterious materials, and shall conform to the current edition of the Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction.

2.04 SAND

- A. Sand shall consist of clean, inert, hard, durable grains of quartz or other hard, durable rock, free from loam or clay, surface coatings and deleterious materials.
1. The allowable amount of material passing a No. 200 sieve as determined by AASHTO-T11 or ASTM D422 shall not exceed 10 percent by weight. The maximum particle size shall be 1/4-inch (i.e., 100 percent passing the No. 4 sieve).
 2. In addition to the above criteria when sand is used for bedding concrete pavers and for utility bedding it shall conform to the following gradation:

Sieve (ASTM D422)	Percent Passing by Weight
No. 4	100
No. 8	80 – 95
No. 16	55 – 85
No. 50	0 – 35
No. 200	0 – 5

2.05 CRUSHED STONE

- A. Crushed Stone shall be composed of durable crushed rock consisting of angular fragments, free from a detrimental quantity of thin, flat, elongated pieces or shall be durable crushed gravel stone obtained by artificial crushing of gravel boulders or fieldstone.
1. The crushed stone shall be free from clay, loam, or deleterious material.
 2. Crushed stone shall conform to the following gradation:

Sieve Size	Percent Passing by Weight		
	3/8-inch Stone	1/2-inch Stone	3/4-inch Stone
1 inch		-	100
3/4 inch		-	90 - 100
5/8 inch		100	-
1/2 inch	100	85 - 100	10 - 50
3/8 inch	85-100	15 - 45	0 - 20
No. 4	10-30	0 - 15	0 - 5
No. 8	10 (max)	0 - 5	-

Sieve Size	Percent Passing by Weight	
	1-1/2-inch Stone	2-inch Stone
2 inch	100	90 - 100
1-1/2 inch	95 - 100	-
1-1/4 inch	-	25 - 50
1 inch	35 - 70	-
3/4 inch	0 - 25	0 - 15
1/2 inch	-	0 - 5

B. Washed Crushed Stone for Stormwater Recharge shall be composed of durable crushed rock consisting of angular fragments, free from a detrimental quantity of thin, flat, elongated pieces or shall be durable crushed gravel stone obtained by artificial crushing of gravel boulders or fieldstone. The crushed stone shall be free from clay, loam, or deleterious material.

1. Washed Crushed Stone for Stormwater Recharge shall conform to the following gradation:

Sieve Size	Percent Passing by Weight	
	2-inch Stone	1-1/2 inch Stone
2 inch	90 - 100	100
1-1/2 inch	-	95 - 100
1-1/4 inch	25 - 50	45 - 80
1-inch	-	35 - 70
3/4 inch	0 - 15	0 - 25
1/2 inch	0 - 5	0 - 5
No. 4	0	0

2. AASHTO Designations:

Sieve Size	Percent Passing by Weight		
	No. 57	No. 3	No. 2
3 inch			100
2-1/2 inch		100	90-100
2 inch		90-100	35 - 70
1-1/2 inch	100	35-70	0 - 15
1 inch	95 - 100	0 - 15	0 - 5
1/2 inch	25 - 60	0 - 5	
No. 4	0 - 10		
No. 8	0 - 5		

2.06 STRUCTURAL FILL

A. Structural Fill shall be free from ice and snow, roots, sod, rubbish and other deleterious or organic matter. Structural Fill shall conform to the following gradation:

Sieve Size	Percent Passing by Weight
*	100
No. 4	30 - 95
No. 40	10 - 70
No. 200	0 - 15

* Two thirds (2/3) of the loose lift thickness.

2.07 FILTER FABRIC AND GEOTEXTILES

- A. Filter Fabric used for prevention of soil intrusion into drains or to assist in stabilizing soil subgrades shall be Mirafi 140N or approved equivalent.
- B. Filter fabric in drainage recharge systems, underdrain systems between crushed stone and granular soils, leaching areas, or where indicated on the plans shall be Mirafi 140N or approved equivalent.

2.08 STORMWATER EMBANKMENT FILL

- A. Stormwater Embankment Fill shall be low permeability fill capable of being placed and compacted to provide an in-situ permeability rate of not more than 1.0×10^{-5} cm/sec.

2.09 CONTROLLED DENSITY FILL

- A. Controlled low strength material or controlled density fill shall be a cement concrete backfill material that flows like a liquid, supports like a solid when cured, and levels without tamping or vibrating to reach 100 percent compaction. The material shall be used primarily as a backfill in lieu of compacted fill. The material shall be proportioned to yield a 28-day minimum compressive strength of 200 pounds per square inch. The material shall be produced and installed in accordance with ACI 229R-13, with a mix formulation to be approved by the Engineer or Geotechnical Consultant prior to placement of the material in the project.

2.10 LOAM BORROW- REFER TO SECTION 329000 PLANTING

PART 3 – EXECUTION

3.01 USE OF MATERIALS

- A. Use of materials shall be as described below and as shown on the plans. Combinations or layering of materials may be necessary in certain instances such as for detention embankments, subsurface disposal areas, and riprap walls as examples.
 1. Common/Ordinary Fill: Use common/ordinary fill for general grading as backfill, and as embankment fill in areas outside the building and pavement limits. Stones larger than twelve inches (12") shall be removed prior to compaction.
 2. Gravel: Use for pipe bedding backfill and backfill below pavement and slab as base course layer. Use for material placed "in the wet". Use for backfill behind retaining walls and retaining structures. Use for pipe and utility bedding.

3. Sand: Use for conduit bedding and initial backfill, and gas line bedding and backfill. Use for bedding and backfill of direct burial cables and/or flexible piping.
4. Crushed Stone: Use crushed stone as a filter material around perforated pipe, bedding for piping under wet subgrade conditions and as a surface treatment.
5. Washed Crushed Stone: Use washed crushed stone in stormwater recharge system as the material around perforated pipe.
6. Structural Fill: Structural fill shall be used for backfill against building foundations and frost walls. Use structural fills below pavement gravel base course.
7. Filter Fabric: Filter Fabric is to be used as a filter barrier between drainage recharge systems, underdrain systems, wastewater absorption systems, and between natural earth material and backfill or other materials to assist in stabilizing soil subgrades.
8. Filter Stone Layer: Use filter stone layer under riprap, stone for pipe ends, slope paving, channel paving and grouted channel paving, or where indicated.
9. Controlled Low Strength Material or Controlled Density Fill: Shall be used for trench backfill, anti-flotation bases, and/or lightweight backfill.
10. Topsoil/Loam: Use as fill in designated landscape and lawn areas; if off-site material is required, Loam shall be furnished and installed. Topsoil maybe used as fill in landscape and lawn areas if an excess of topsoil exists on-site.

3.02 DEWATERING – SEE SECTION 312319

3.03 EXCAVATION – GENERAL

A. General Definitions

1. Unclassified Materials

Unclassified excavation includes the satisfactory removal and disposal of all materials (except contaminated materials defined below) encountered regardless of the nature of the materials and shall be understood to include, but not be limited to, blast rock, bedrock, earth, hardpan, fill, foundations, pavements, curbs, piping, railroad track and ties, cobblestones, footings, bricks, concrete, abandoned drainage and utility structures, and debris. Drilling, blasting, excavation, and disposal of rock shall be considered unclassified excavation and shall be included as a part of the Contract Price, with no separate payment items for its excavation and handling.

2. Contaminated Materials

- a. The Contractor shall be familiar with the State of Rhode Island Department of Environmental Management (RIDEM) regulations governing the management of hazardous materials, hazardous waste, petroleum, used petroleum and solid waste when conducting earthwork operations
- b. In general, a hazardous waste (contaminated with oil or hazardous materials) is a waste or combination of wastes which, because of its quantity, concentration, physical, chemical or infectious characteristics, may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or pose a substantial present or potential hazard to human health, safety, or welfare, or to the environment when improperly stored, treated, transported, or disposed of, or otherwise managed.

- c. There are known contaminations on the site. A CAP Alteration and Soil Management Compliance Work Plan has been prepared and submitted to RIDEM for their approval. A copy of the plan is included in Appendix A of these specifications.
 - d. The Contractor shall immediately halt soil movement activities and notify the Owner if visual, olfactory, or other evidence suggests that soils may be contaminated with oil or hazardous materials. Contractor shall provide reasonable assistance to Owner and to Owner's Representative for access to potential contamination areas for proper assessment of hazardous conditions.
 - e. The Owner will contact an environmental professional (such as a Licensed Site Professional) to test any earth materials suspected of containing hazardous waste. The results shall be evaluated by the environmental professional and compared with reporting thresholds found in the RIDEM Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases. The Owner will inform the Contractor of the laboratory test results as soon as possible and discuss the possible soil management, disposal, and recycling options available. Contaminated soils shall be managed and handled in compliance with the referenced state & federal regulations, guidelines, and policies. Time and expenses associated with contaminated soils shall be negotiated between the Contractor and the Owner prior to the start of the soil management, soil disposal, and recycling work. Owner reserves the right to negotiate and contract with other entities for remedial work and, in that event, this Contractor shall make reasonable accommodations for other entities to perform this work.
 - f. Proper documentation of legal disposal of hazardous materials handled by this Contractor shall be provided by the Contractor to the Owner, Engineer, and review authorities.
- B. Site General Requirements
1. Control the grading so that ground is pitched to prevent water from running to excavated areas, damaging other structures, or adjacent properties.
 2. Where soil has been softened or eroded by flooding, equipment, traffic, or placement during unfavorable weather, or other conditions, it shall be removed and replaced by the Contractor with suitable material, and at no cost to the Owner.
 3. Exercise care to preserve the material below and beyond the lines of excavation. Where excavation is carried out below indicated grade or beyond the lines of excavation, Contractor shall backfill and compact the over excavation with structural fill to the indicated grade, at no additional cost to the Owner and at the direction of the Engineer.
 4. Provide sheeting, shoring and bracing to complete and protect all excavated areas, as required for safety and compliance with OSHA. Costs for sheeting, shoring, and bracing shall be included as a part of the Contract Price for completing the work and Owner will make no separate payment for this work.
 5. Excavated materials unsuitable for reuse, surplus excavated rock, and surplus excavated soil not used to fulfill requirements of the Contract, shall become the property of the Contractor and shall be removed from the site in accordance with the regulations and requirements of all municipalities or agencies having jurisdiction over the disposal sites and the route between the project and the disposal sites.

6. Unsuitable materials which are classified as organics such as peat, trash, fill, stumps, debris, material determined to be hazardous, and topsoil and subsoil when determined by Engineer to be unacceptable for incorporation into the work.
 7. Suitable material, as determined by the Engineer, may be reused on the site provided it meets the gradation requirements for the given materials as specified under 2.0 MATERIALS.
 8. The Contractor shall not over-excavate below proposed design grades for the purpose of obtaining borrow for use off-site.
- C. Proof Rolling
1. Prior to placing compacted fills, the Contractor shall proof roll the natural grades to remain. Where materials of low density are indicated by rutting or weaving under the compactor, the Contractor may be required to make up to three (3) additional complete passes of the area with the compactor as determined by the Engineer. The cost of all proof rolling shall be included in the Contract Price. If materials of low density are encountered that cannot be compacted to the extent necessary to support the proposed embankment fills as determined by the Engineer, the Contractor shall remove those materials and replace them with compacted fill.
 2. Alternately, an initial layer of fill may be allowed to form a working platform. The need, manner of construction, and thickness of such a layer shall be subject to approval of the Engineer and the layer will be permitted only where the lack of support is, as determined by the Engineer, not due to deficient ditching, grading or drainage practices, or where the embankment could be constructed in the approved manner by the use of different equipment or procedures. Thickness of up to eighteen inches (18") may be permitted for such a layer.

3.04 TRENCH EXCAVATION

- A. Excavate as necessary for all drainage pipes, utilities, and related structures and appurtenances, and for any other trenching necessary to complete the work.
- B. Definitions:
 1. Trench shall be defined as an excavation of any length where the width is less than twice the depth and where the shortest distance between payment lines does not exceed ten feet (10'). All other excavations shall be defined as open excavations.
 2. The words "invert" or "invert elevation" as used herein shall be defined as the elevation at the inside bottom surface of the pipe or channel.
 3. The words "bottom of the pipe" as used herein shall be defined as the base of the pipe at its outer surface.
- C. In general, machine excavation of trenches will be permitted with the exception of preparation of pipe beds which will be hand work. Excavate by hand or machine methods to at least six inches (6") below the bottom of pipe or as shown on the Drawings. Excavation to final grade shall be made in such a manner as to maintain the undisturbed bearing character of the soils exposed at the excavation level.

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- D. Utilities or piping shall not be laid directly on boulders, cobbles, or other hard material. This material shall be removed to a minimum of six inches (6") below the bottom of pipe at all points and backfilled or compacted as specified.
- E. Remove unsuitable material encountered at subgrade elevations, backfill with material specified herein and as otherwise indicated on the Drawings, specified, or directed. Compact as specified with approved compactors.
- F. In general, the width of trenches shall be kept to a minimum and in the case of piping shall not exceed the sum of the pipe's outside diameter plus 2'-0" to at least twelve inches (12") above the pipe.

3.05 BACKFILLING AND PLACEMENT OF FILL MATERIALS

A. Site

1. Dewater subgrade areas prior to filling.
2. Compaction by puddling or jetting is prohibited.
3. Control groundwater and surface runoff to minimize disturbance of exposed natural ground surface, previously placed and compacted fill and material being placed.
4. Soil fill moisture shall be maintained at an acceptable working range to allow for proper compaction.
5. Do not place fill on frozen ground.
6. Do not place frozen fill.
7. Place fill in uniform horizontal layers and compact immediately after placement. Where the horizontal layer meets a rising slope, the layer shall be keyed into the slope by cutting a bench during spreading of preceding lift.
8. To the extent that is practical, each layer of fill shall be compacted to the specific density the same day it is placed.
9. Slope fill surfaces at the end of each day to provide for free surface drainage.
10. Protect structures and pipes from damage during backfilling operations. Repair damage at no cost to Owner.
11. Placement of fill shall not begin prior to observation and approval of subgrade conditions by Engineer.
12. Protect foundations, footings, and waterproofing during backfilling. Repair damage at no cost to Owner.
13. Prior to backfilling between foundation wall and sheeting, remove unsuitable material, including rubbish, organic materials, or other debris. Do not commence filling operations until conditions have been observed by Engineer.
14. Backfill shall not be placed against walls until they are braced or have cured sufficiently to develop strength necessary to withstand, without damage, pressure from backfilling and compacting operations.
15. Provide shoring, sheeting, and bracing of excavations as required to assure complete safety against collapse of the earth at the site of excavations. Alternatively, lay back excavations to suitable slope.
16. Upon completion of the work, the final ground surface shall be left in a firm, unyielding, true, uniform condition free from ruts. Repair disturbed areas caused equipment traffic at no cost to Owner.

B. Equipment

1. Compaction equipment used in open areas where space permits shall consist of vibratory rollers, fully loaded ten-wheel dump trucks, pneumatic compactors, or other similar equipment.
2. Compaction equipment for fill against foundation walls and in other confined areas shall be accomplished by means of drum-type, power-driven, hand-guided vibratory compactors operating at 2,000 cycles per minute, or by hand-guided vibratory plate tampers.

C. Placing Fill

1. Fill sections and embankments shall be constructed of earth, rock, or a mixture of earth and rock deposited in successive lifts. Except as hereinafter permitted, the loose thickness of each lift shall not be more than twelve inches (12") before compaction.
2. Rock fill may be used in deep fill areas, placed to the levels and under the conditions described in Section 2.01K.
3. No rock in excess of six inches (6") in its largest dimension shall be incorporated in the top two foot (2') layer of embankment immediately below the subgrade.
4. During fill and embankment construction operations, earth moving equipment shall be routed as evenly as possible over the entire width of the work.
5. At the close of each day's work the working surface shall be crowned, shaped, and rolled with smooth steel or pneumatic tired rollers to ensure proper drainage.
6. Prior to placing compacted structural fill below the slab, the surface of natural ground, shall be proof-rolled with a heavy vibratory drum roller or a fully loaded ten-wheel dump truck. Hard and soft spots shall be excavated and replaced with structural fill or other material acceptable to the Owner's Representative.
7. Where excavations for slab-on-grade extend to weathered fractured or blasted bedrock, the Owner's Representative shall assess the rock surface for the presence of voids and may require placement of a 2 inch to 18-inch layer of choke stone or crushed stone prior to placement of structural fill.

D. Fills under Parking Areas

1. Paved area subgrades shall be excavated to a minimum of 12 inches (12") beneath required subgrade elevation or existing grade, whichever is lower.
2. Proof-roll subgrade with a vibratory roller or a fully loaded ten-wheeled dump truck. Soft or hard areas and other objectionable material (stumps, wood, organics) shall be excavated and backfilled with compacted common fill.
3. Where excavations for pavements extend to weathered, fractured, or blasted bedrock, prepare surface as indicated in Section 3.05B. for building and pavement areas.
4. A minimum of 12 inches (12") of gravel base course shall be provided between subgrade and the bottom of the bituminous surface.

E. Subgrades under Proposed Landscape Areas

1. Fills under tree and shrub planting areas shall be backfilled with topsoil/loam materials.

3.06 TRENCH BACKFILL

A. General

1. Trenches shall be backfilled as soon as practicable with suitable approved materials. All trench backfilling shall be done with special care, in the following manner and as the Engineer may direct from time to time.
2. Backfill material for pipe bedding shall be deposited in the trench, uniformly on both sides of the pipe, for the entire width of the trench to the spring-line of the pipe. The backfill material shall be placed by hand shovels in layers not more than 6 inches (6") thick in loose depth and each layer shall be thoroughly and evenly compacted by tamping on each side of the pipe to provide uniform support around the pipe.
3. Trench backfilling shall be placed so as not to disturb the previously installed pipes, utilities, concrete, and other work within and near the trench. The moisture content of the backfill material shall be such that proper compaction will be obtained. Backfill of trenches within areas of pavement construction shall be made in controlled compacted lifts extending to grades required to establish the proper pavement base courses.
4. In backfilling trenches, each layer of backfill material shall be adequately compacted in such a manner as to provide the required bearing value, so that paving can proceed immediately after backfilling is completed.
5. Any trenches or excavations improperly backfilled, or where settlement occurs, shall be reopened to the depth required for proper compaction, then refilled and compacted with the surface restored to the required grade and condition, at no additional cost to the Owner.
6. During filling and backfilling operations, pipelines will be checked to determine whether any displacement of the pipe has occurred. If the inspection of the pipelines shows poor alignment, displacement of pipe, or any other defects, the condition shall be remedied by removal, realignment, and backfill of the pipe, in a manner satisfactory to the Engineer at no additional cost to the Owner.

B. Embedment

1. The type of materials to be used in bedding and backfilling shall conform to the details shown on the Drawings and the following:1. Embedment materials are those used for bedding, haunching and initial backfill. Perform in accordance with ASTM D2321. The following will describe the soils:
 - a. Class I - Angular crushed stone or rock, dense or open graded with little or no fines (3/4-inch stone size) (to be used in wet conditions or where shown on the Drawings).
 - b. Class II - Clean, coarse grained gravel, with a maximum stone size of 1-1/2 inches.
 - c. Embedment materials shall be free from lumps of frozen soil or ice when placed. Embedment materials shall be placed and compacted at optimum moisture content.
2. Foundation: A stable utility foundation of Class I or II material must be provided to insure proper line and grade is maintained. Unsuitable foundations such as organics, soft clay, and other soft materials must be removed and the material stabilized. Unsuitable or unstable foundation materials shall be undercut and replaced with a suitable bedding material of Class I or Class II (see 3.08B.5.), placed in 6-inch (6") lifts. The Engineer may approve other methods of stabilization, such as the use of geotextiles.

3. Bedding: Provide a stable and uniform bedding for the pipe and any protruding features of its joints and/or fittings. The bedding for the middle 1/3 of the pipe outside diameter should be loosely placed so that the pipe conforms to the trench. The remainder of the bedding at the base of the trench shall be compacted to a minimum of 95 percent modified proctor density as determined by ASTM D1557. Class I or Class II materials are suitable for use as bedding.
4. Haunching: Proper haunching provides a major portion of the pipe's strength and stability. Care must be exercised to insure placement and compaction of the embedment material in the haunches. For larger diameter pipes (greater than 30" in diameter), embedment materials should be worked under the haunches by hand. Haunching materials may be Class I or Class II materials and shall be placed and compacted in 6-inch (6") maximum lifts, compacted to 95 percent modified proctor density.
5. Initial Backfill: Initial backfill materials are required for a minimum of 3/4 of the pipe diameter. The initial backfill shall be from the pipe's springline to 12 inches above the pipe to provide protection for the pipe from construction operations during placement of the final backfill and protect the pipe from stones or cobbles in the final backfill.
 - a. Class I materials must be used in wet trenches and Class I bedding and haunching materials shall be used.
 - b. Class II materials shall be used unless noted otherwise or wet conditions are encountered. The material shall be compacted in 6 inch (6") lifts to 95 percent modified proctor density (ASTM D1557).
 - c. Flooding or jetting as a procedure for compaction are not allowed.
6. Controlled Low Strength Materials (CLSM) or Controlled Density Fill (flowable fills) are acceptable backfill materials. Several considerations should be accounted for when using CLSM/CDF backfill. Provisions to prevent flotation of the pipe during placement of the CLSM/CDF must be used. This can include anchoring the pipe by placing flowable fill at the each joint and allowing the fill to partially cure prior to placing the flowable fill along the entire length of the pipe. Also, mechanical anchors such as bent rebar driven into competent soil or precast weights may be used at each joint to prevent flotation. When using CLSM/CDF, the fill should always be placed to completely encase the pipe.
7. Backfill. Backfill from one foot (two feet for HDPE pipe) above the top of the pipe to subgrade elevations shall be structural fill material. Generally, the excavated trench material may be used as this backfill. This backfill shall be placed in 12-inch (12") maximum lifts and compacted to a minimum of 92 percent modified proctor density to prevent excessive settlement at the surface.
8. Vehicular and Construction Loads: Pipe installation shall be suitable to carry H-25 live loads (40,000 lbs. axle - legal load) with 24 inches (24") of cover.

3.7 BACKFILL AGAINST STRUCTURES

- A. Backfilling against masonry or concrete shall only be done when approved. The Contractor shall not place backfill against or on structures until they have attained sufficient strength to support the loads (including construction loads) to which they will be subjected, without distortion, cracking or other damage. As soon as practicable after the structures are structurally adequate and other necessary work has been satisfactorily completed, any

leakage tests or other testing of the structures shall be made by the Contractor, as required by the Engineer, at the Contractor's expense.

1. After the satisfactory completion of leakage tests and the satisfactory completion of any other required work in connection with the structures, the backfilling around the structures shall proceed using suitable and approved excavation material. The best of the backfill material shall be used for backfilling within 2 feet (2') of the structure. Just prior to placing backfill, the areas shall be cleaned of all excess construction material and debris and the bottom of excavations shall be in a thoroughly compacted condition.
- B. Symmetrical backfill loading shall be maintained. Special care shall be taken to prevent any wedging action or eccentric loading upon or against the structures.
 1. During backfilling operations, care shall be exercised that the equipment used will not overload the structures in passing over and compacting these fills. Except as otherwise specified or directed, backfill shall be placed in layers not more than 12 inches (12") in loose depth and each layer of backfill shall be compacted thoroughly and evenly using approved types of mechanical equipment. Each pass of the equipment shall cover the entire area of each layer of backfill.
- C. In compacting and other operations, the Contractor shall conduct his operations in a manner to prevent damage to structures due to passage of heavy equipment over and adjacent to structures. Repair damage made by the Contractor, at no additional cost to the Owner.
- D. After backfilling the Contractor shall maintain the surfaces of backfill areas in good condition so as to present a smooth surface at all times level with adjacent surfaces. The Contractor shall repair any subsequent settling over backfilled areas immediately, in a manner satisfactory to the Engineer, and such maintenance shall be provided by the Contractor for the life of this Contract, at no additional cost to the Owner.
- E. The finished subgrade of the filled excavations upon which pavements are to be constructed shall not be disturbed by traffic of other operations and shall be maintained in a satisfactory condition until the finished courses are placed. The storage or stockpiling of materials on finished subgrade will not be permitted.
- F. Uniformly smooth grade all areas to be graded, as indicated including excavated sections and all areas disturbed as a result of the Contractor's operations. The finished surfaces shall be reasonably smooth, compacted and free from surface irregularities.

3.08 COMPACTION

- A. Compaction Requirements
 1. The degree of compaction is expressed as a percentage of the maximum dry density at optimum moisture content as determined by ASTM D1557, Method C. The compaction requirements are as follows:

Area of Compaction	Minimum Degree
Below footings	95%
Below slabs	95%
Detention basin berms	95%
Pavement base course	95%
Pavement subbase	95%
General fill below pavement subbase	90%
Trench backfill	92%
Lawn areas	90%

2. Compaction percentages are based on the laboratory derived Maximum Density Values.

B. Moisture Control

1. Fill that is too wet for proper compaction shall be harrowed or otherwise dried to a proper moisture content to allow compaction to the required density. If fill cannot be dried within 24 hours of placement, it shall be removed and replaced with drier fill.
2. Fill that is too dry for proper compaction shall receive water uniformly applied over the surface of the loose layer. Sufficient water shall be added to allow compaction to the required density.
3. In no case shall fill be placed over material that is frozen. No fill material shall be placed, spread, or rolled during unfavorable weather conditions. When work is interrupted by heavy rains, fill operations shall not be resumed until the moisture content and the density of the previously placed fill are as specified.

C. Lift Thickness of Material

1. Structural Fill and Sand Borrow. Place in layers not to exceed 12 inches (12") in thickness when utilizing heavy compaction equipment, and 6 inches (6") when utilizing light hand-operated compaction equipment.
2. Common Fill. Place in layers not to exceed 12 inches (12") in thickness when utilizing heavy compaction equipment, and 8 inches (8") when utilizing light hand-operated compaction equipment.
3. Crushed Stone, Gravel, Dense, Graded Crushed Stone for Subbase. Place in layers not to exceed 9 inches (9") in thickness when utilizing heavy compaction equipment, and 6 inches (6") when utilizing light hand-operated compacted equipment. Compact with a minimum of four (4) coverages of acceptable compaction equipment.

3.09 PROTECTION OF FILL

- A. Protection of compacted fill shall be the responsibility of the Contractor. Newly graded areas shall be protected from the actions of the elements and traffic. Any settlement or washing that occurs prior to acceptance of the work shall be repaired and grades shall be established to the required elevations and slopes. Damage to any compacted lift (including those lifts previously tested and approved by the Engineer) occurring at any time during the course of construction, which is caused by equipment, moisture entering the embankment, or from any other cause, shall be fully repaired by the Contractor prior to placement of

overlying materials, at no additional cost to Owner and to the complete satisfaction of the Engineer.

- B. In the event of and prior to the commencement of heavy rains, the Contractor shall suspend fill operations immediately and shall take all necessary steps to keep the site as well drained as possible. Fill operations shall not be resumed until the moisture content of the fill is such as to permit compliance with the Specifications.
- C. All corrective work or operations necessary to maintain proper moisture control of the fill material shall be at the expense of the Contractor.

3.10 GRADING TOLERANCES

- A. Grading shall be completed to meet or exceed the following tolerances of uniformity*:

Location	Tolerance
Top of Subgrade Beneath Structures	1/2 inch
Top of Subgrade Beneath Paving	1/2 inch
Top of Subgrade Beneath Landscape Areas	1 inch
Top of Gravel and Gravel Bases	1/4 inch

* Uniformity is defined as no variations in the surface materials at the grades and slopes indicated on the Drawings that exceed the listed tolerance over a length of ten feet (10') horizontally in any direction.

END OF SECTION 310000

SECTION 311000
SITE CLEARING

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section specifies requirements for site clearing including demolition of site structures.
- B. The work includes:
 - 1. Clearing and grubbing.
 - 2. Site demolition of structures, retaining walls, signage, light standards, foundations and appurtenances.
 - 3. Removal and abandonment of utilities.
 - 4. Filling or removal of underground tanks and piping.
 - 5. Disposal of material from clearing, grubbing, thinning and demolition in approved off-site disposal areas.
 - 6. Filling of voids and excavations resulting from the work.

1.02 RELATED SECTIONS

- A. Other Specification Sections which directly relate to the work of this Section include:
 - 1. Section 312500 – EROSION AND SEDIMENTATION CONTROLS.
 - 2. Section 310000 – EARTHWORK.

1.03 SITE CONDITIONS

- A. Site conditions existing during the bidding period will be maintained by the Owner insofar as practical.
- B. Actual site condition variations that differ from those of the bidding period and which affect site clearing operations shall be brought to the attention of the Owner prior to the commencement of any site work.

1.04 SUBMITTALS

- A. The Contractor shall submit the following information to the Engineer for review before commencing work:
 - 1. All permits and notices authorizing site clearing and demolition.
 - 2. Certificates of utility service severances.
 - 3. Permits for transport and disposal of debris.
 - 4. Demolition procedures and operational sequence.
 - 5. Calculations.

PART 2 – PRODUCTS

None

PART 3 – EXECUTION

3.01 PROTECTION

- A. The Contractor shall flag the limits of clearing shown on the drawings by accurate field survey with marked stakes or other means acceptable to the Engineer. The Engineer shall be notified a minimum of five (5) working days prior to scheduled commencement of clearing operations to review the flagged limits. Adjust the clearing limits as directed by the Engineer.

3.02 UTILITIES

- A. Notify all corporations, companies, individuals, or local authorities owning or having jurisdiction over utilities running to, through, or across areas to be affected by site clearing operations.
- B. Locate and identify existing utilities that are to remain and protect them from damage.
- C. For utilities to be disconnected, have utility services disconnected in accordance with the requirements of the utility owner.

3.03 CLEARING AND GRUBBING

- A. Clearing shall include cutting, removal, and off-site disposal of trees, bushes, shrubs, stumps, fallen timber, brush, refuse, trash, fencing and other incidental materials not required for reuse on the site.
- B. The Contractor shall grub the area within the clearing limits to completely remove stumps and root systems.
- C. Depressions, excavations and voids resulting from the removal of stumps or roots shall be filled with suitable material and compacted as specified under Section 310000 – EARTHWORK.

3.04 DEMOLITION REQUIREMENTS

- A. Conduct demolition operations in a manner that will prevent damage to adjacent structures, utilities, pavements, and other facilities to remain.
- B. Cease operations immediately if any damage, settlement or other adverse effect on adjacent structures occurs. However, if an obvious unsafe condition is created that would potentially cause injury to persons or undue harm to properties, the Contractor shall take whatever measures are warranted to prevent such injury or harm. Immediately notify the Engineer and regulatory authorities. Do not resume operations until conditions are corrected, damage repaired and approval has been received from the appropriate authorities and the Owner's Representative.
- C. Obtain written permission from adjacent property owners when demolition equipment will traverse, infringe upon, or affect access to their property. Copies of the permission documents shall be submitted to the Engineer.
- D. Provide hoses and water connections. Spray water on demolition debris to minimize dust.

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- E. Clean adjacent structures and improvements of dust, dirt, and debris caused by demolition operations. Return adjacent areas to condition which existed prior to start of work.
- F. All hazardous waste removal shall be performed by a hazardous waste contractor qualified and duly licensed in the State of Rhode Island to remove, transport, and dispose of each type of hazardous substance. See the requirements of the CAP Alteration and Soil Management Compliance Work Plan in Appendix A.
- G. Comply with federal, state, and local regulations pertaining to the crushing, processing, and reuse of Asphalt Pavement, Brick and Concrete Rubble.

3.05 DEMOLITION

- A. Demolish buildings completely and remove from site, or remove intact, in accordance with the approved permits, procedures and operational sequence.
- B. Locate demolition equipment and remove materials in a manner that prevents excessive loading to supporting walls, floors, or framing.
- C. Remove all debris and other materials from basement areas.
- D. The Contractor may break up and leave in place concrete floor slabs that are 4 or more feet below finished grade. Remove all concrete foundations and floors within 4 feet of finished grade.

3.06 FILLING BASEMENT AND VOIDS

- A. Completely fill all voids including, but not limited to: basement areas, excavation areas, and voids resulting from demolition or removal of structures including underground fuel storage tanks, wells, and cisterns with suitable material as specified in Section 310000 – EARTHWORK.
- B. Areas to be filled shall be free of standing water, frost, frozen, and unsuitable material prior to fill placement.
- C. Place and compact fill materials in conformance with the requirements of Section 310000 – EARTHWORK.
- D. Grade surface of filled areas to match adjacent grades and slope to provide surface drainage.

3.07 REMOVAL AND ABANDONMENT OF UTILITIES

- A. All existing structures, utilities, and appurtenances of any kind shall be completely removed within the limits of excavation for the new buildings and for a distance of 10 feet beyond. Remove all utilities beneath exterior columns and for a distance of 10 feet beyond.
- B. All abandoned utilities and utility structures greater than 8 inches in diameter located at least 4 feet below bottom of finished grade shall be sealed with concrete or brick masonry at the limit of excavation. All utilities shall be entirely removed within 4 feet of finished grade.

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- C. Manholes and catch basins designated to be abandoned shall have all lines plugged with brick and mortar prior to filling with sand or gravel. The top 4 feet of these structures shall be removed and the bottom slab broken up to permit drainage prior to filling.
- D. The Contractor shall remove frames, covers, and grates from manholes, catch basins and gate valves and satisfactorily store and protect them until they are required for reuse in the work. Existing frames, covers, and grates determined by the Engineer to be unsuitable for reuse shall be removed from the site.

3.08 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove from site all materials resulting from site clearing and demolition operations.
- B. No burning of any material will be allowed.

END OF SECTION 311000

SECTION 312319
DEWATERING

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section specifies the dewatering requirements for control of surface and subsurface water within the site.
- B. The work includes:
 - 1. Control of surface water runoff to prevent flooding of excavations, trenches, and adjacent properties, and the saturation and loosening of soils.
 - 2. Removal of subsurface water from excavations and trenches.
 - 3. Provision of equipment and facilities to remove sediment and control the rates and volumes of disposal of surface and subsurface waters removed from the work areas.
 - 4. Provisions for the protection of adjacent and downgradient properties and environmental resources.

1.02 RELATED SECTIONS

- A. Sections which directly relate to the work of this Section include:
 - 1. Section 311000 – SITE CLEARING.
 - 2. Section 312500 – EROSION AND SEDIMENTATION CONTROLS.
 - 3. Section 310000 – EARTHWORK (SITE).
 - 4. Section 334000 – STORM DRAINAGE UTILITIES.

1.03 DEWATERING SYSTEM REQUIREMENTS

- A. The Contractor shall design the dewatering systems to:
 - 1. Effectively reduce the hydrostatic pressure and lower the groundwater levels to a minimum of 2 feet below the bottom of excavations;
 - 2. Develop a substantially dry and stable subgrade for the proposed work;
 - 3. Prevent damage to adjacent properties, buildings, structures, utilities and other facilities;
 - 4. Ensure that, after 12 hours of initial pumping, no soil particles will be present in the discharge;
 - 5. Retain all sediments on-site within the work area.
- B. Locate dewatering facilities where they will not interfere with utilities and construction work to be done by others.
- C. Modify dewatering equipment and procedures when operations threaten to cause damage to new or existing facilities or adjacent areas not within the Limits of Work.
- D. If needed, collect and have analyzed representative groundwater samples from within the Limits of Work to support disposal via RIDEM Remedial General Permit or via containerization and transportation to an off-Site licensed disposal facility.

1.04 SUBMITTALS

- A. Prior to installation of the dewatering system, submit working drawings and design data prepared by a registered professional engineer licensed in the jurisdiction of the Project, with the following information:
 - 1. The proposed types of dewatering systems;
 - 2. Arrangement, location and depths of system components;
 - 3. Complete description of equipment and instrumentation to be used including installation, operation, and maintenance procedures;
 - 4. Types and sizes of filters and/or remediation treatment units (e.g., carbon filtration, etc.), if needed;
 - 5. Design calculations demonstrating adequacy of the proposed system and equipment;
 - 6. Provisions and methods of sediment removal and disposal of water; and
 - 7. All permits required for the work.
- B. Submit records required in Article 3.03.

PART 2 – PRODUCTS

(Not Applicable)

PART 3 – EXECUTION

3.01 SURFACE WATER CONTROL

- A. Intercept and divert surface water runoff away from excavations through the use of dikes, curbing, walls, ditches, pipes, sumps or other approved means.
- B. Provide and maintain ditches of adequate size to collect and prevent surface and subsurface water seepage from entering the excavations. Divert the water to settling basins or other approved equipment required to reduce the amount of fine particles before discharge into drainage pipes and natural water courses. If a drainage system or water course is silted or becomes blocked due to dewatering operation, it shall be cleaned by the Contractor at no additional cost to the Owner. Any enforcement actions or fines resulting from improper dewatering and/or discharge of turbid water and sediment to protected areas shall be the sole responsibility of the Contractor.

3.02 DEWATERING EXCAVATIONS

- A. Accomplish dewatering in accordance with the means and methods submitted as required in Article 1.04. Keep the Engineer advised of any changes required to accommodate field conditions and, on completion of the dewatering system installation, revise and resubmit the information required to show the installed system.
- B. Perform dewatering operations to lower the groundwater level in excavations as required to provide a stable, dry subgrade for the prosecution of the proposed work.
- C. Maintain dewatering operations in a manner that prevents buildup of excessive hydrostatic pressure and damage to structures and the subgrade.

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- D. Do not allow water to accumulate in excavations. Contractor shall provide and maintain ample means and devices to remove promptly, and to dispose of properly, all water entering excavations and to keep them dry until the proposed work is completed.
- E. Do not discharge water to protected environmental resources without treatment to remove suspended solids and sediments.
- F. No pipe shall be laid in water. No masonry shall be laid in water, and no water shall be allowed to inundate new concrete and new brick masonry within 48 hours after installation. Contractor shall constantly guard against the possibility of flotation of pipe or structures after installation. Backfill or other means shall be placed promptly to prevent this occurrence.

3.03 RECORDS FOR WELL SYSTEMS

- A. When well point or other type of well systems are used for dewatering, the following information shall be obtained and recorded:
 - 1. The average flow rate and time of operation of each pump used in the dewatering system. Provide appropriate devices, such as flow meters, for observing the flow rates. Submit the data, in tabular form, during the period that the dewatering system is in operation.
 - 2. The groundwater elevations during the period that the dewatering system is in operation. Submit observation records daily within 24 hours of reading.
 - 3. During the initial period of the dewatering, make required observations on a daily basis. If, after a specified period, dewatering operations have stabilized, observations may be changed to longer intervals as accepted by the Engineer.

END OF SECTION 312319

SECTION 312500
EROSION AND SEDIMENTATION CONTROLS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section specifies requirements for temporary and permanent erosion and sedimentation control provisions as they relate to the construction process.
- B. The work includes:
 - 1. Providing and maintaining all temporary erosion and sedimentation control measures shown on the Drawings and required by the Engineer during the life of the Contract to control soil erosion and water pollution.
 - 2. The installation and maintenance of additional 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) to be developed by the Contractor which is required by the EPA or its' locally designated agency.

1.02 RELATED SECTIONS

- A. Sections which directly relate to the work of this Section include:
 - 1. Section 311000 – SITE CLEARING
 - 2. Section 312319 – DEWATERING
 - 3. Section 310000 – EARTHWORK (SITE)
 - 4. Section 329000 – PLANTING
 - 5. Section 329220 – SEEDING AND SODDING

1.03 DEFINITION AND COORDINATION OF EROSION AND SEDIMENTATION CONTROL PROVISIONS

- A. Permanent erosion and sedimentation control measures are defined as those elements that are to be incorporated into the final project product, including but not necessarily limited to such items as: finish paving and landscape, detention basin forebays, sedimentation control structures (, catch basins, etc.), swales and ditches, berms, and other such items.
- B. Temporary erosion and sedimentation control measures are defined as those elements that are required by permit approvals and necessary to be installed by the Contractor to meet federal, state and local regulations for the construction program, including, but not necessarily limited to, such items as: silt fences, berms, portable sedimentation basins, straw bales, check dams, and other such items, all of which shall be removed by the Contractor after installation of permanent erosion and sedimentation control measures, stabilization of the site, and prior to final completion of the project.

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- C. The temporary control provisions shall be coordinated with the permanent erosion and sedimentation control features to the extent practical to ensure economical, effective, and continuous erosion and sedimentation controls throughout the construction and post-construction periods.

1.04 LAWS AND REGULATIONS

- A. The project requires a Construction General Permit from the RIDEM Office of Water Resources RIDPES Program. Once approved, the RIDEM Permit No. TBD is hereby incorporated into these specifications. Contractor shall prepare and post signs as required by RIDEM.
- B. Compliance with the RIPDES Stormwater Regulations is the responsibility of the Contractor.

1.05 PRIOR TO CONSTRUCTION

- A. Prior to the start of the construction, the Contractor shall submit to the Engineer the following: schedules for the construction of required stormwater detention basins, temporary and permanent erosion and sediment control work, clearing and grubbing, grading, structures at watercourses, construction, and paving. No work shall be started until control schedules and methods of operations have been submitted to the Engineer.
- B. Proof of submittal and receipt of an acknowledgement of the Notice of Intent (NOI) for an RIPDES General Permit for Construction Activities as further outlined under this Section, Section 312500 – EROSION AND SEDIMENTATION CONTROLS.

1.06 CONSTRUCTION OPERATIONS

- A. When in the opinion of the Engineer it becomes necessary, the Engineer will inform the Contractor of construction procedures and operations that jeopardize erosion and sedimentation control provisions. If these construction procedures and operations are not corrected promptly, the Owner may suspend the performance of any or all construction until corrections have been made, and such suspension shall not be the basis of any claim by the Contractor for additional compensation from the Owner nor for an extension of time to complete the Work.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Temporary erosion control seed for quick growing grasses such as wheat, rye or oats shall be planted only when permanent grasses (See Section 329220 - SEEDING AND SODDING) cannot be planted due to the growing season. All permanent grass areas planted with temporary erosion control seed shall be replaced with permanent seed. Apply seed mixture at a rate of 100 pounds per acre.

Seed	Percent by Weight	Percent Germination Minimum
Winter Rye	80 Minimum	85
Red Fescue(Creeping)	4 Minimum	80
Perennial Rye Grass	3 Minimum	90
Red Clover	3 Minimum	90
Other Crop Grass	0.5 Maximum	
Noxious Weed Seed	0.5 Maximum	
Inert Matter	1.0 Maximum	

- B. Erosion Control Blanket/Fabric Netting - See Section 329220 - SEEDING AND SODDING.
 - 1. Curlex blankets, as manufactured by American Excelsior Company.
 - 2. Erosion Control Blankets SC150BN for embankments equal to or steeper than 2 to 1 or C125BN for drainage swales where stone is not used as manufactured by North American Green.
- C. Straw bale sediment traps consisting of straw bales banded with wire or nylon tape (minimum two bands for bale) approximately two-feet, six-inches in length.
 - 1. Stakes for straw bales shall be 1-1/2 inch by 1-1/2 inch by 4 feet long or approved equal.
- D. Silt fence fabric shall be 100X, as manufactured by Mirafi.
- E. Filter fabric at construction entrance shall be 600X, as manufactured by Mirafi.
- F. Silt Sacks and Sediment Control Devices
 - 1. Silt sacks shall be a woven polypropylene geotextile fabric with strength per ASTM D4884 manufactured to fit the opening of the catch basin. Silt sacks shall be Siltsack[®] as manufactured by ACF Environmental, Inc., or approved equal.
 - 2. Silt sacks shall be manufactured with a high flow bypass weir for large inflow events. Field modification, including cutting or puncturing of the fabric, will not be allowed.
 - 3. Install at locations indicated on the Drawings.
- G. Siltsock / Sediment Wattle / Filter Sock filled with compost or straw as manufactured by Filtrexx International, LLC or Agresource, or approved equal.

PART 3 – EXECUTION

3.01 EROSION AND SEDIMENTATION CONTROL - STRAW BALES

- A. Straw bales shall be installed at the locations, shown on the Drawings and in general as follows:
 - 1. Toe of slope of embankment construction to filter all runoff flowing to off-site discharges.
 - 2. Toe of temporary earthwork stockpile slopes.

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3. Across construction ditches prior to entry into drainage system or waterway, and at 50 foot intervals along the remainder of the ditch.
 4. Surrounding completed drainage inlets.
 5. Other locations shown on the Contract Drawings and required by laws, regulations, and permits.
- B. Straw bales shall be installed in line with each bale installed tight against the previous bale to form a continuous barrier. Secure bales in place with two (2) stakes per bale. The bales shall be set in a trench approximately 4 inches into the ground. Soil shall be placed on the upside slope of the bales. Deteriorated, destroyed, or rotted bales shall be replaced immediately. Sediment shall be removed and disposed of periodically from behind the straw bales. The accumulated sediment shall not be allowed to rise above the mid-height of the bale. All sediment, straw bales, and appurtenances shall be removed and disposed of at the completion of the Contract.

3.02 TEMPORARY EROSION CONTROL MATS

- A. Erosion control mats shall be installed in accordance with the manufacturer's recommendations.
- B. Areas to receive mats shall be smooth graded and compacted. Remove all rocks, dirt clods, vegetation, and other obstructions that may cause damage to the mats.
- C. Unroll mats parallel to the direction of water flow and lay flat against the ground. Overlap roll ends a minimum of 1 foot with upslope mat on the top to prevent uplift of mat end by water flow. Overlay adjacent edges of mat by six (6) inches. Extend mat a minimum of 2 feet above the crest of steep slopes and anchor by excavating a 6 inch deep trench, and secure end of mat in trench using staples or pins furnished by manufacturer of mat. After securing mat end in place, backfill and compact trench.

3.03 SILT FENCE

- A. Silt fence shall be installed at locations as shown on the Drawings.
- B. Supporting posts shall be spaced 4 feet on center and driven at least 1 foot into the ground. Posts shall be 1-1/2 inch square or heavier wood posts or standard steel posts.
- C. Fabric shall be anchored in a 4-inch deep trench dug on the upslope side of the posts. The trench shall be at least 4 inches wide. The fabric shall be laid in the trench, backfilled, and compacted.
- D. Fabric rolls shall be spliced at posts. The fabric shall be overlapped 6 inches, folded over, and then securely fastened to posts.
- E. Silt fences shall be inspected immediately after each storm event and at least daily during prolonged rainfall.

3.04 SEDIMENT WATTLE / FILTER SOCK

- A. Shall be installed at the locations, shown on the Drawings and in general as follows:
1. Toe of slope of embankment construction to filter all runoff flowing to off-site discharges.
 2. Toe of temporary earthwork stockpile slopes.
 3. Across construction ditches prior to entry into drainage system or waterway, and at 50 foot intervals along the remainder of the ditch.
 4. Surrounding completed drainage inlets.
 5. Other locations shown on the Contract Drawings and required by laws, regulations, and permits

3.05 CONSTRUCTION REQUIREMENTS - TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. The Contractor shall construct all permanent erosion and sedimentation control features at the earliest practical time as outlined in the accepted schedule. Temporary erosion and sedimentation control measures shall be used to correct conditions that develop during construction which were unforeseen but are needed prior to installation of permanent erosion and sedimentation control features, or that are needed temporarily to control erosion or sedimentation which develops during construction operations.
- 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 sedimentation control features can follow immediately thereafter, if conditions permit; otherwise, temporary erosion and sedimentation 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 from the Contractor's monthly progress payment.
- 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 straw bales and other devices as required by the Engineer.
- 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.

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- 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. Per RIPDES Permit 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 14 days, temporary stabilization is not required.
- I. All disturbed areas shall be re-vegetated by loaming and seeding unless otherwise noted on the approved plan.

3.06 MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES

- A. The Contractor shall check the condition of erosion and sedimentation control devices daily and maintain them in good operating condition. Straw bales shall be replaced when deteriorated.
- B. The Contractor shall inspect the condition of diversion dikes and ditches, filter berms, interceptor dikes, sediment basins, and other erosion and sedimentation control devices after each rainstorm and during major storm events. Repairs shall be made as necessary.
- C. During construction, temporary outlets of the drainage systems shall direct the flow to temporary or permanent sedimentation basins.
- D. Temporary soil erosion and sedimentation control devices shall be removed and adjacent areas outside the limits of grading restored upon completion of the work or when required by the Engineer.

END OF SECTION 312500

SECTION 321610
CURBING

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section specifies requirements for furnishing and installing all types of curbing including the following: granite curb and concrete curb.
- B. The work includes:
 - 1. Furnishing and installing granite curb, curb corners, precast concrete curb, and cast-in-place concrete curb.
 - 2. All associated items and operations required to complete the installations, including surface preparation, concrete support, jointing, and finishing.

1.02 RELATED SECTIONS

- A. Sections which directly relate to the work of this Section include:
 - 1. Section 033055 – CAST-IN-PLACE CONCRETE (SITE)
 - 2. Section 311000 – SITE CLEARING
 - 3. Section 310000 – EARTHWORK

1.03 REFERENCE STANDARDS

- A. References herein are made in accordance with the following abbreviations and all work under this Section shall conform to the latest editions as applicable.

ACI 304	Guide for Measuring, Mixing, Transporting and Placing Concrete
ANSI/ASTM D1751	Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types)
ANSI/ASTM D1752	Standard Specification for Preformed Sponge Rubber, Cork, and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction
ASTM C33	Standard Specification for Concrete Aggregates
ASTM C94	Specification for Ready-Mixed Concrete
ASTM C150	Standard Specification for Portland Cement
ASTM C260	Standard Specification for Air-Entraining Admixtures for Concrete
ASTM C309	Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
ASTM C494	Standard Specification for Chemical Admixtures for Concrete

1.04 SUBMITTALS

- A. Submit shop drawings and manufacturer's literature for granite and precast curb, and corners indicating size, shape and dimensions, finish, and setting method for Engineer's approval.
- B. Submit copies of tests on representative samples of the concrete used in the manufacture of precast units showing a compressive strength of 5,000 psi to the Engineer prior to shipping any units.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Granite and precast curb units shall be adequately protected from damage during transit to the site.
- B. Curbing shall be protected against staining, chipping, and other damage. Cracked, badly chipped, or stained units will be rejected and shall not be employed in the work.

PART 2 – PRODUCTS

2.01 GRANITE CURB

- A. Granite curb shall be light gray in color, free from seams and other structural imperfections or flaws which would impair its structural integrity, and of a smooth splitting appearance. Natural color variation characteristic of the deposit from which the curb is obtained will be permitted.
- B. Whenever curbing is sawed, all surfaces that are to be exposed shall be thoroughly cleaned and any iron rust or iron particles removed by sandblasting or other methods approved by the Engineer and any saw mark in excess of 1/8 inch shall be removed.
- C. Dimensions
 - 1. The stones for the several types of granite curb shall be cut to the dimensions and curvature hereinafter needed:

Type	Minimum Length	Width at Top	Depth	Minimum Width at Bottom
VA-4	6 feet	7 inches	17 to 19 inches	4 inches (for 2/3 length)

- 2. Stones to be set on a radius of 100 feet or less shall be cut to the required curvature, unless otherwise approved and, except for making closures, shall be of the following minimum lengths:

Radius	Minimum Length
50 feet to 100 feet	6 feet
25 feet to less than 50 feet	4 feet-6 inches
10 feet to less than 25 feet	3 feet

D. Finish

1. Granite curb shall have a top surface free from wind and shall be been hammered or sawed to an approximately true plane and shall have no projections or depressions greater than 1/8 inch. The front and back arris lines shall be pitched straight and true and there shall be no projection on the back surface for 3 inches down from the top which would exceed a batter of 4 inches to 1 foot.
 - a. The front face shall be at right angles to the planes of the top and ends of the curb unit and shall be smooth quarry split, free from drill holes and with no projection of more than 1 inch and no depression of more than 1/2 inch measured from the vertical plane of the face through the arris or pitch line for a distance down from the top of 8 inches. For the remaining distance, there shall be no projection or depression greater than 1 inch measured in the same manner.
 - b. The ends of all stones shall be square with the planes of the top and face of the curb so that when the stones are placed end to end as closely as possible, no space shall show in the joint at the top and face of more than 1/2 inch for the full width of the top and for 8 inches down on the face; after which the end may break back not over 8 inches from the plane of the joint. The arris formed by the intersection of the plane of the joint with the planes of the top and exposed faces shall have no variation from the plane of the top and exposed faces greater than 1/8 inch.

2.02 PRECAST CONCRETE CURB

- A. The concrete shall have a minimum compressive strength of 5,000 psi at 28 days, and shall contain 5 to 7 percent entrained air. The material shall conform to Section 033055 – CAST-IN-PLACE CONCRETE (SITE).
- B. All precast curb with radius of 100 foot or less shall be formed to the radius shown on the Drawings.
- C. Precast concrete curb units shall be rubbed finished, as follows:
 1. After the concrete has properly hardened, the exposed surfaces shall be rubbed with a #16 carborundum stone or an approved abrasive to fully remove laitance and sand grain finish. No cement shall be used in the rubbing process.
 2. The finish of the units shall be uniform and shall conform to those of adjacent work in their final position.
- D. Precast concrete curb sections shall be furnished with sockets in each end to receive dowels to maintain the horizontal and vertical alignment of the curb. The dowel socket shall be 11/16 inch by 2-1/2 inches. Provide 5/8 inch by 4 inch dowels.

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2.03 CEMENT MORTAR

- A. Cement mortar shall be composed of one part Portland cement and two parts of sand by volume with sufficient water to form a workable mix. Cement shall be Portland cement ASTM C150, Type II.

PART 3 – EXECUTION

3.01 GENERAL

- A. Trenching, excavation, backfilling, and compaction shall be completed in accordance with Section 310000 – EARTHWORK, except as modified within this Section.
- B. Cement mortar bedding, if required, shall be placed as shown on the Drawings and in accordance with Section 033055 – CAST-IN-PLACE CONCRETE (SITE).

3.02 GRANITE CURB INSTALLATION

- A. Excavation shall extend six (6) inches below and behind curb, as shown on the Drawings.
 - 1. The gravel base shall be placed in the excavated area, graded and compacted to above the proposed curb subgrade.
- B. Curbing and curb corners shall be set on additional gravel spread upon the foundation. All spaces under the curb and curb corners shall be filled with gravel thoroughly compacted so that the curb and curb corners will be completely supported throughout their length. The curb shall be set at the line and grade required as shown on the plans unless otherwise directed.
- C. Curb and curb corners shall be fitted together as closely as possible.
- D. Immediately after the curb and curb corners are set, the space between it and the wall of the trench shall be filled with gravel thoroughly tamped to a depth of 6 inches, care being taken not to affect the line or grade of the curb and curb corners. The trench shall continue to be filled with gravel and compacted in 6-inch lifts until grade is achieved. If the curb materials and trench are part of reconstruction work and existing bituminous concrete surface is to remain, then the use of concrete backfill is acceptable, to an elevation suitable to support the pavement patch or section.
- F. The joints between curbstones (both front and back) shall be carefully filled with cement mortar and neatly pointed on the top and front exposed portions. After pointing, the curbstones shall be satisfactorily cleaned of all excess mortar that may have been forced out of the joints.
- G. Transitions from normal curb settings to wheelchair ramps shall be accomplished with transition curb as shown on the drawings. Transitions shall be of the same type curb and similar to that abutting the transition piece and, if on a curve, of the same radius.

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- H. The ends of the stone curb at driveways and intersections shall be cut at a bevel or rounded, as shown on the Drawings.
- I. If curb and curb corners of different quarries is used on the same project, curbing of each particular quarry shall be segregated and set to give uniform appearance.
- J. Procedures for removal and resetting of existing granite curb, and new granite curb, in existing pavements shall include the following:
 - 1. Prior to excavation for existing granite curb removal, the pavement surface shall be saw cut a minimum of one foot from the face of curb.
 - 2. Existing curb shall be carefully excavated and removed in a manner that protects the curb and existing pavement to remain from damage.
 - 3. Existing granite curb shall be cleaned by sandblasting as required to remove bituminous material, paint and concrete from exposed surfaces prior to resetting in the proposed work.
 - 4. New granite curb shall be set to match the top of existing granite curb remaining in place at abutting sections and, if required, transitioned to the typical section shown on Drawings within the first section of curb. Cement concrete shall be placed along the front face of the curb as shown on the Drawings.

3.03 PRECAST CONCRETE CURB

- A. Precast units delivered to the site shall be inspected for damage, unloaded and placed along the prepared curb trench, or other designated location, with the minimum amount of handling.
 - 1. Materials shall be handled in a manner that prevents damage to the curb units.
 - 2. All individual pieces of curved curbing shall be marked to correspond to the radius and location where curbing is to be set.
- B. Excavation shall extend 6 inches below and behind finished curb, as shown on the Drawings.
 - 1. The gravel base shall be placed in the excavated area, compacted and graded to the proposed curb subgrade.
- C. Precast concrete curb units shall be doweled together continuously to the line and grade shown on the Drawings. Any units damaged during setting operations shall be removed and replaced.
- D. After the curb is set, the trench shall be backfilled immediately with approved material. The first layer shall be 4 inches in depth and compacted. The other layers shall be not more than 6 inches in depth and compacted until the trench is filled. Care shall be taken to prevent disturbing the line or grade of the curb during this procedure.

3.04 CAST-IN-PLACE CONCRETE CURB

- A. General: Concrete curb shall be cast in place to the size, shape, line and grade shown on the Drawings. The curbing shall be constructed using clean, undamaged forms and in segments separated by construction joints and expansion joints.
- B. Preparation: The curb trench shall be excavated, and the gravel base placed to the dimensions shown on the Drawings. The gravel base shall be compacted and graded to the proposed curb subgrade.
- C. Forms: Forms shall be metal or acceptable planed and matched lumber, straight and free from warp or other irregularities that will adversely affect the installation. Forms shall conform to the curb cross-sections shown on the drawings and shall be carefully set to line and grade, thoroughly braced and secured in place so that there will be no displacement during placing of the concrete. All forms shall be thoroughly cleaned prior to reuse.
- D. Placing of Concrete: Prior to placing the concrete, the subgrade shall be moistened, and the contact surfaces of the forms given a light coating of oil that will not discolor the concrete. Concrete shall be placed in the form, struck off with a template and spaded or otherwise compacted to eliminate voids and finished to a smooth even surface. The concrete may be compacted by mechanical vibrators if approved by the Engineer. Placing by slip form methods shall be approved by the Engineer.
- E. Expansion Joints: Vertical expansion joints shall be located approximately every 75 linear feet and shall match the location of points of curb curvature and tangency and expansion joints in any adjacent concrete pavements and sidewalks. Expansion joints shall be constructed vertical, plumb, and at right angles to the face of the curb. Expansion joints shall be 1/2 inch in width and formed with premolded bituminous joint filler cut to conform to the curb cross-section.
- F. Construction Joints: Vertical construction joints shall be located approximately every 15 feet equally spaced between expansion joints. The length of the curb segments may be varied slightly for closures, but in no case shall they be less than 8 feet. Construction joints shall be vertical, plumb and at right angles to the face of the curb and shall be formed by approved method that will provide complete separation of the curb segments during the placing of the concrete. If curb is formed by slip form methods, the joints shall be sawed as soon as practicable after the concrete has set to prevent raveling during the sawing and before any shrinkage cracking occurs in the concrete.
- G. Finishing: Forms shall be left in place for 24 hours or until the concrete has sufficiently cured to permit removal without injury to the curb. Upon removal of the forms, the exposed faces of the curb shall be immediately rubbed to a uniform surface. Rubbing shall be performed by an experienced concrete finisher. Plastering with cement mortar to fill defects will not be permitted.

END OF SECTION 321610

SECTION 321723
PAVEMENT MARKINGS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section specifies requirements for removal of existing pavement markings and construction of new pavement markings.
- B. The work includes:
 - 1. Removal of existing markings by approved methods.
 - 2. Pavement surface preparation.
 - 3. Furnishing and installing new pavement markings.

1.02 RELATED SECTIONS

- A. Sections which directly relate to the work of this Section include:
 - 1. Section 310000 – EARTHWORK
 - 3. Section 321610 – CURBING

1.03 SITE CONDITIONS

- A. The Contractor shall cordon off areas where markings are being applied but maintain access for vehicular and pedestrian traffic as required for other construction activities. Flagmen, barricades, drums, warning signs, warning lights, and similar devices shall be used as required.

1.04 SUBMITTALS

- A. Submit material certificate to the Engineer, signed by the material producer and Contractor, certifying that materials comply with these specifications and have been approved for use by the Rhode Island Department of Transportation (RIDOT).

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Pavement markings shall conform to Section T.20 and Section M.17 of the current Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction and Manual of Uniform Traffic Control Devices, current editions.
- B. Traffic markings shall be yellow or white Traffic Marking Paint and shall be on the RIDOT Approved Materials list.

PART 3 – EXECUTION

3.01 PREPARATION

- A. The Contractor shall clean the pavement of dust, dirt, old pavement markings, concrete curing compounds, and other foreign material which may be detrimental to the adhesion of the pavement marking materials.

3.02 REMOVAL OF EXISTING PAVEMENT MARKINGS

- A. Existing pavement markings that conflict with the proposed markings and those shown on the Drawings shall be removed.
 - 1. Pavement markings shall be removed before any change is made in the traffic pattern.
 - 2. Any excessive damage to the pavement caused by pavement marking removal shall be repaired by the Contractor by methods acceptable to the Engineer at no additional cost to the Owner.
- B. Approved methods of pavement markings removal include:
 - 1. Sandblasting using air or water
 - 2. High pressure water
 - 3. Steam or superheated water
 - 4. Mechanical devices such as grinders, sanders, scrapers, scarifiers and wire brushers
- C. Painting over a pavement marking line with asphaltic liquids or paints will not be allowed unless approved by the Engineer.
- D. Material deposited on the pavement from removal operations shall be removed as the work progresses. Accumulations of sand or other material which might interfere with drainage or could constitute a hazard to traffic will not be permitted.
- E. Where sandblasting is used for the removal of pavement markings and the removal operation is being performed within 10 feet of a lane occupied by traffic, the residue, including dust, shall be removed immediately as the marking removal progresses by a vacuum attachment operating concurrently with the blast cleaning operation, or by other methods approved by the Engineer.

3.03 PAVEMENT MARKING APPLICATION

- A. The material shall be applied to the pavement by equipment designed and manufactured specifically for the application of pavement markings.
- B. The Contractor shall employ the services of a registered land surveyor to provide control for layout of pavement markings.
- C. Paint markings shall be applied at a minimum thickness of 15+ 1 mil. Thermoplastic markings shall be applied at 125 to 188 mils thickness.

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- D. Pavement markings shall be applied in accordance with the layout shown on the Drawings. No paint shall be applied to new bituminous pavement until the top course has cured at least one week and allow two weeks curing for newly installed bituminous concrete curbing.
- E. All parking stalls shall be single stripe and shall be spaced equally. The line indicated on the Drawings is on the center line of the stall marking.
- F. Where entire areas are to be cross-hatched, the striping shall conform to the cross-hatching shown on the Drawings.
- G. All parking stall markings shall be straight with sharp corners and clean edges. Directional arrows, cross-hatching, lane divider stripes, stop lines, and lettering shall be painted white to the size, length, and spacing shown on the Drawings.
- H. All markings shall be applied in one coat with brush, spray, or marking machine over clean dry pavement surfaces, when the atmospheric temperature is at or above 40°F., and when the weather is otherwise favorable in the opinion of the Engineer.
- I. Use only skilled workmen who are experienced and normally employed in the work of installing pavement markings. Supply all the necessary equipment and materials required for the work.
- J. The Contractor shall protect the buildings, walks, pavement, curbing, trees, shrubs, mulch, and other site fixtures from over-spray of paint and damage from pavement marking operations.
- K. Traffic shall not be permitted on the pavement until the paint is thoroughly dry.

END OF SECTION 321723

SECTION 329000
PLANTING

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section specifies requirements for the preparation and planting of trees, shrubs, and other plants in landscaped areas.
- B. The work includes:
 - 1. Testing, furnishing, and placement of planting soils
 - 2. Fertilizing and backfill soil mix
 - 3. Furnishing and installation of trees, shrubs, and groundcover plants
 - 4. Maintenance, clean-up, and guarantee
 - 5. Planting Establishment

1.02 RELATED SECTIONS

- A. Sections which directly relate to the work of this Section include:
 - 1. Section 310000 – EARTHWORK
 - 2. Section 311000 – SITE CLEARING
 - 3. Section 312500 – EROSION AND SEDIMENTATION CONTROLS
 - 5. Section 329220 – SEEDING AND SODDING

1.03 SUBMITTALS

- A. Manufacturer's Product Data
 - 1. Submit material manufacturer's literature and installation instructions where applicable attesting that the following materials meet the requirements specified:
 - a. Loam / Topsoil
 - b. Fertilizers and soil amendments
 - c. Antidesiccant
 - d. Aged Bark Mulch
 - e. Staking materials and nylon straps
- B. Soil Test Reports
 - 1. Prior to accepting on-site topsoil for re-use or ordering borrow loam, submit soil test reports to the Landscape Architect for review and approval. Testing shall be as described in these specifications. Do not order materials until the Landscape Architect's approval has been obtained. Delivered materials shall closely match the approved samples.
- C. Certificates
 - 1. A Certificate of Compliance to the specifications shall be submitted by the nursery grower with each shipment of each type of plant, certifying that plants meet the genus, species, and cultivator type specified on the Plant List.

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- D. Maintenance Manual
 - 1. The Contractor shall submit a written manual prepared for the Owner that outlines a schedule for proper maintenance of the plantings. This maintenance schedule shall include timing and methods for watering, fertilization, mulching, pruning, and other maintenance operations.
- E. Submittal Schedule
 - 1. Before installation:
 - a. Soil Test Reports
 - b. Manufacturer's Product Data
 - c. Plant Certification
 - 2. After installation and before acceptance:
 - a. Maintenance Manual

1.04 QUALITY ASSURANCE

- A. Qualification of Landscape Contractor: The work of this Section shall be performed by a landscape contracting firm which has successfully installed work of a similar quality, schedule requirement, and construction detailing with a minimum of five years' experience. Proof of this experience shall be submitted per SUBMITTALS paragraph of this Section.
- B. Qualification of Foreman or Crew Leader: All work of unloading, stockpiling, storing, transporting on-site, planting, staking and guying, fertilizing, and maintenance of trees, shrubs, vines, groundcover, and perennials shall be supervised by a foreman or crew leader who is a certified landscape professional or a certified horticulturist.
- C. The ratio of laborers to certified landscape professionals or certified horticulturist shall not exceed twelve to one. Certified Landscape Professional or Certified Horticulturist shall be on the project site throughout the day to day performance of the work of this Section.
- D. Selection of Nursery Stock and Plant Approval
 - 1. All plant material shall be selected by the Landscape Architect at the grower's nursery prior to delivery, and upon delivery at the site for conformity to specification requirements. All trees shall be tagged at the source prior to digging. The Landscape Architect will inspect and tag all trees with the Contractor's representative in attendance.
 - 2. At least fourteen (14) days prior to the date on which the tree selections are to be made and at least 28 days prior to the expected planting date, the Contractor shall make a written request that the Landscape Architect designates a representative from its technical staff to select and tag trees to be planted at the supplier nursery. The letter of request shall also have attached a certification from the supplier attesting to the fact that the stock to be selected from are, in fact, the particular trees required under this Section.
 - 3. No substitutions will be accepted without prior approval. All plants on the Plant List shall be pre-selected by the Contractor to ensure that plants of specified size and species are available at the nursery before the plant selection trip is scheduled. Substitution requests shall be made on or before the time of notification of the date on which the tree selections are to be made at the source nursery. Substitution Requests

shall list at least five major nursery sources contacted for confirmation of unavailability. Any proposed substitutions must be reviewed by the Landscape Architect and approved in writing by the Owner's Representative.

4. For inspection trips outside the 6 New England states, the Contractor shall arrange for and bear the cost of transportation, meals in transit, and overnight accommodations, if necessary, for the Landscape Architect during the period of time required to select and to tag the required plant materials.
5. The Landscape Architect will provide the necessary tags or seals for identifying the selected trees at the source.
6. Approval of plants at the source does not replace additional inspection and rejection at the site, or during the progress of the work. Rejected plants shall be removed immediately from the site. A Contractor's representative shall be present at all inspections.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Plant material shall be protected from desiccation during digging, storage, and transportation by watering, covering, and application of anti-desiccants, as necessary to ensure their continued health and viability. Trees shall be dug, handled and transported so as to prevent damage of any sort including but not limited to breakage of branches, scraped or bruised trunk, or broken root balls.
- B. Move plant material with solid balls wrapped in burlap or synthetic wrapping.
- C. Deliver plant materials to site in healthy and undamaged condition, immediately prior to placement
- D. When trees cannot be transported and planted immediately upon being dug they shall be stored and protected from desiccation and extremes in temperature by being heeled-in, watered, and covered and/or sprayed with an anti-desiccant.
- E. Keep plant materials moist. As required by temperature or wind conditions, apply antidesiccant emulsion to prevent drying out of plant materials.
- F. Reject plants when ball of earth surrounding roots has been cracked or broken preparatory to, or during, process of planting.
- G. Reject plants when burlap, staves, and ropes required for transplanting have been displaced prior to acceptance.

1.06 GUARANTEE

- A. The Contractor shall provide a one-year guarantee from date of plant material acceptance.
- B. Replace plant materials found dead or not in a healthy growing condition. Plants shall exhibit at least 85% healthy branching and foliage, and shall be free of insect or disease damage. Replace plants during normal planting season.
- C. Replacement: Replacement plant materials shall be of same size and species as originally installed. The Landscape Architect shall be given a five-day notice of installation of replacement plants to allow inspection of plant material. A new one year guarantee commencing on date of replacement shall be provided for all replacement plantings.

1.07 INSPECTION FOR ACCEPTANCE

- A. After the minimum sixty (60) day maintenance period, the Contractor shall submit a request to the Landscape Architect, in writing, for an inspection to determine whether the plant material is acceptable. If the plant material and workmanship are acceptable, written notice will be given by the Landscape Architect to the Contractor stating that the guarantee period begins from the date of the Certificate of Provisional Acceptance.
- B. If a substantial number of plants are sickly and dead at the time of inspection, acceptance will not be granted, and the Contractor's responsibility for maintenance of all the plants shall be extended until replacements are made. All dead and unsatisfactory plants shall be promptly removed from the site. Replacements shall conform in all respects to the specification for new plants and shall be planted in the same manner.

PART 2 – PRODUCTS

2.01 PLANT MATERIALS

- A. The Contractor shall furnish and plant all plants shown on the Drawings. Plants shall conform to measurements and species designated on plant list and standards as established in American Standard for Nursery Stock ANSI Z60.1, latest edition.
- B. All plant material shall be nursery grown and shall be shapely, well-grown, healthy, sound, and free of disease, insect pests, eggs or larvae, and shall have a well-developed root system. No field collected trees will be accepted. All plants shall be typical of their species or variety and shall have a normal habit of growth. They shall conform to the trade classification of "heavy specimen". The root system of each plant shall be well provided with dense, fibrous roots.
- C. All trees and shrubs shall be freshly dug; no heeled-in plants and no plants from cold storage will be accepted. Trees shall have been transplanted or root pruned at least once in the last three years. All plants shall be hardy under climatic conditions similar to those in the locality of the work. All plant materials shall be properly identified by name on legible, weatherproof labels securely attached thereto.
- D. Root systems shall be solid natural balls of earth firmly wrapped with untreated eight (8) ounce organic burlap, securely held in place by stout cord or wire. Processed or manufactured root balls or inorganic (plastic) burlap will not be accepted. No trees will be accepted if the ball of earth surrounding its roots has been badly cracked or broken. The diameter and depth of the root ball must be sufficient to encompass the fibrous and feeding root system necessary for healthy development of the tree.
- E. Trees shall be good examples of their species or variety, with uniform, well developed branch structure, balanced head, and a single, straight leader. Plants that meet the measurements specified, but do not possess a normal balance between height and spread will be rejected.
 - 1. The trunk of each tree shall be a single uncut leader and straight trunk growing from a single unmutilated crown of roots. No part of the trunk shall be conspicuously crooked as compared with normal trees of the same variety. No trees that have had their leaders cut, scarred, scraped, bruised, or wounded, will be accepted.

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2. The trunk shall be free from sunscald, frost cracks, or wounds resulting from abrasions, fire or other causes. No pruning wounds shall be present having a diameter exceeding two inches and such wounds must show vigorous bark growth on all edges. Trees shall not be pruned prior to delivery.
 3. When indicated on the Plant List, the overall height of the trees (measured from the crown of the roots to the tip of the top branch) shall be not less than the minimum size designated.
- F. Container grown plants shall have sufficient roots to hold planting mix intact after removal from containers without being root-bound.
 - G. Plants that meet the measurements specified, but do not possess a normal balance between height and spread will be rejected.
 - H. Plants shall not be pruned before delivery. Trees which have a damaged or crooked leader, or multiple leaders, will be rejected. Trees with abrasion of the bark, sunscalds, disfiguring knots or fresh cuts of limbs over 1-1/4 inches which have not completed calloused, will be rejected.
 - I. Certificates of inspection shall accompany the invoice for each shipment of plants as may be required by laws for transportation. File certificates with the Construction Manager prior to unloading material at the Project site. Inspection at place of growth does not preclude rejection of the plants at the site.
 - J. Plant material which is to be planted after the specified seasons for planting shall be dug during the normal season for digging of the particular plant material and be stored and maintained in good health until planting. The Contractor shall pay all costs for maintaining plant material while it is being stored.
 - K. Plant List: If there is any discrepancy between quantities shown on the Plant List and work shown on the Drawings, the Contractor shall supply the plants required to complete the work as shown on the drawings. Where the size of a plant on the Plant List is a variation between a minimum and maximum dimension, the sizes of the plants furnished shall be equal to the average of the two dimensions. Where a single dimension is given, it shall be the minimum size of the plants to be furnished.

2.02 PLANTING SOILS

A. Topsoil/Loam Borrow

1. Topsoil (stripped from site) or Loam Borrow (supplied from off-site) shall be a 'fine sandy loam' or a 'sandy loam' determined by mechanical analysis (ASTM D 422) and based on the "USDA Classification System". On-site topsoil may be used for planting or for lawns if the material meets these specifications. Topsoil/Loam Borrow shall be of uniform composition, consisting of a fertile, friable, natural topsoil/loam typical of locality, without admixture of subsoil, refuse or other foreign materials, shall be obtained from a well-drained arable site, and shall meet ASTM D5268. Material shall be such a mixture of sand, silt and clay particles as to exhibit sandy and clayey properties in about equal proportions. Material shall be free of stumps, roots, heavy or stiff clay, stones larger than 3/4-inch in diameter, lumps, coarse sand, noxious weeds, sticks, brush or other litter, and shall have the following mechanical analysis:

U.S. Sieve No.	Percent Passing by Weight	
	Maximum	Minimum
#4	----	100
#10	100	85
#20	100	70
#40	76	50
#100	45	30
#200	34	24

2. Prior to stripping, the topsoil shall demonstrate, by the occurrence upon it of healthy crops, grass or other vegetative growth, that it is reasonably well drained and that it does not contain toxic amounts of either acid or alkaline elements.
3. Topsoil/Loam shall have a pH value in the range of 6.0 to 7.0. If Topsoil/Loam material does not fall within the required pH range, limestone or aluminum sulfate shall be added to bring the pH within the specified limit.
4. Loam and topsoil shall contain not less than 4 percent nor more than 20 percent organic matter as determined by the loss on ignition of oven-dried samples. Test sample shall be oven-dried to a constant weight at a temperature of 230°F. ±9°.
5. In other portions of these Specifications, the words 'Loam', 'Loam Borrow', and 'Topsoil' are used interchangeably.
6. Leaf Mold: Leaf Mold for use for amending topsoil to meet the minimum specifications shall be a highly organic dark brown to black spongy residue resulting from the well aerated composting of deciduous tree parts, free of plants and their roots, debris, and other extraneous matter and shall be uncontaminated by foreign matter and substances harmful to plant growth. The organic matter shall not be less than 85 percent by weight as determined by the loss on ignition of oven-dried samples. Test samples shall be oven-dried to a constant weight at a temperature of 16 degrees C. The inorganic residue after ignition shall not be finer textured than 4 percent by weight passing the number 200 sieve with washing.

B. SOILS TESTING

1. All topsoil/loam obtained from on-site and from off-site sources intended to be used in the work shall be tested prior to being spread or mixed. All testing shall be done by an approved independent testing laboratory or by the agriculture unit of state university system. Contractor shall provide required representative samples of material for testing to the testing laboratory site. Test reports for each material shall be submitted to the landscape architect.
2. Test analysis reports shall include:
 - a. Location of sample source(s)
 - b. Mechanical gradation (sieve analysis) providing USDA classification of the soil; Percent sand, silt and clay particles; Percent organic content Sieve analysis shall be by combined hydrometer and wet sieving using sodium hexametaphosphate as a dispersant in compliance with ASTM D 422 after destruction of organic matter by H₂O₂. To facilitate review and approval of sieve analysis, provide a computer generated gradation curve.
 - c. Percent of organics shall be determined by the loss on ignition of oven-dried samples. Test samples minus #10 material shall be oven-dried to a constant weight at a temperature of 450 degrees Fahrenheit.

- d. Chemical analysis shall be undertaken for Nitrate Nitrogen, Ammonium Nitrogen, Phosphorus, Potassium, Calcium, Magnesium, extractable Aluminum, Lead, Zinc, Cadmium, Copper, Soluble Salts, and pH and buffer pH. A Conductivity Meter shall be used to measure Soluble Salts in 1:2 soil/water (v/v). Except where otherwise noted, nutrient tests shall be for available nutrients. Tests for phosphorus, potassium, calcium, soluble salts, cation exchange capacity, and soil pH in accordance with the current AOAC International "Standards".
 - e. Testing laboratory's recommendation for soil amendments and fertilizers to correct soils deficiencies as necessary. Test reports shall include specific recommendations as to the exact types, times, and rates of application of soil additives and fertilizers based upon the soil test results and type of material to be planted.
 - f. Test reports shall include specific recommendations as to the exact types, times, and rates of application of soil additives and fertilizers based upon the soil test results and type of material to be planted.
3. Contractor shall note that soil additive materials and fertilizer types and requirements included in these specifications are approximate and all soil additives shall be adjusted to comply with test reports.

2.03 SOIL CONDITIONING MATERIALS

- A. Apply conditioning materials in accordance with the recommendations of testing laboratory.
- B. Limestone for adjustment of soil pH shall be ground dolomitic limestone containing not less than 85% of total carbonated and shall be ground to such a fineness that 40% will pass through a 100-mesh sieve and 90 percent will pass through a 20-mesh sieve. Coarser material shall be acceptable provided specific rates of application are increased proportionately on the basis of quantities passing the 100-mesh sieve. Limestone shall be uniform in composition, and shall be dry and free flowing. Limestone shall be delivered to the site in original unopened containers, each bearing manufacturer's guaranteed analysis.
- C. Commercial Fertilizer shall conform to state and federal fertilizer laws. Commercial fertilizer shall be uniform in composition, dry and free flowing, and shall be delivered to the site in the original, unopened containers, each bearing the manufacturer's guaranteed analysis. Any fertilizer which becomes caked or otherwise damaged, making it unsuitable for use, will not be accepted. At least 50% by weight of the nitrogen contents of the fertilizer shall be derived from organic sources. A minimum of 35% of the nitrogen shall be water insoluble. Where not otherwise indicted by the Soil Test Results or the soils testing Lab's recommendations, fertilizer shall contain not less than percentage of weight of ingredients as follows or as recommended by soil analysis:

Plant Material to be Fertilized /Fertilizer Type	Nitrogen N	Phosphorus P	Potassium K
Deciduous Trees and Shrubs (dry)	10%	6%	4%
Deciduous Trees and Shrubs (water soluble)	6%	19%	16%
Evergreen Trees and Shrubs (dry)	7%	7%	7%
Evergreen Trees and Shrubs (water soluble)	21%	7%	7%

- D. Humus shall be natural humus, reed peat or sedge peat. Humus shall be free from excessive amounts of zinc, low in wood content, free from hard lumps, shall be furnished in a shredded or

granular form, and shall pass through a 1/2 inch mesh screen. According to the methods of testing of AOAC International latest edition, the pH range shall be 5.5 to 7.0 and the organic content shall be not less than 60% as determined by drying at 105 degrees C. The minimum water absorbing ability of the humus shall be 200% by weight on an oven-dry basis.

- E. Peat Moss shall not be used on this project.
- F. Manure shall be well-rotted, unleached stable manure not less than eight months and not more than two years old, free from sawdust, shavings, or refuse of any kind and shall not contain over 25% straw. The Contractor shall furnish information as to kind of disinfectant or chemicals, if any, that may have been used in storage of the manure.
- G. Bone Meal shall be fine ground, steam-cooked, packing house bone with a minimum analysis of 23% phosphoric acid and 1.0% nitrogen.
- H. Leaf Mold shall be a highly organic dark brown to black spongy residue resulting from the well-aerated composting of deciduous tree parts, free of plants and their roots, debris, and other extraneous matter and shall be uncontaminated by foreign matter and substances harmful to plant growth. The organic matter shall not be less than 85% by weight as determined by the loss on ignition of oven-dried samples. Test samples shall be oven-dried to a constant weight at a temperature of 16 degrees C. The inorganic residue of leaf mold after ignition shall not be finer textured than 4% by weight passing the No. 200 sieve with washing.
- I. Mulch shall be native shredded pine bark, 100% organic, composted for a minimum of 6 months, having a maximum moisture content of 40%, and shall be free of any disease and insects. Mulch material shall pass a 1 inch square mesh and be retained on a 1/8 inch square mesh. Color shall be a naturally occurring Dark Brown. Mulch shall not be dyed.

2.04 PLANT BACKFILL MIXTURE

- A. Plant backfill mixture shall consist of 50% topsoil/loam borrow, 25% in-situ topsoil and 25% compost or leaf mold, by volume, thoroughly mixed together. In addition, plant backfill mixture shall have fertilizer, cow manure, and other additives added as required by recommendations of the testing laboratory reports.
- B. The plant backfill mixture shall have a pH of 5.5 to 7.0.

2.05 WATER

- A. Water shall be furnished by the Contractor in the quantities required to maintain healthy growth of plant materials and shall be suitable for irrigation and free from ingredients harmful to plant life. The Contractor shall provide all hoses and other watering equipment required for the work.

2.06 SUPPORT MATERIALS

- A. Nylon tree straps shall be used for staking trees. Straps shall be sized per manufacturer's recommendations for the size of tree.
- B. Stakes shall be hardwood stakes and shall be sharp pointed at one end. Size and length of the stakes shall be as required for staking and guying.

- C. Wire guys shall only be used with the approval of the Landscape Architect and the Owner, and shall never be used in near areas of typical pedestrian access. When used at the Contractor's option and the approval of the Landscape Architect and Owner, wire for staking and guying shall be pliable annealed twisted galvanized steel wire, galvanized eyebolts, and galvanized turnbuckles of sufficient strength to withstand wind pressure. Hose to encase wires and cables shall be new two-ply reinforced rubber garden hose not less than 1/2-inch in diameter, black in color.
- D. Material for supporting trees shall be in accordance with the following schedule:

Tree Type/Tree Size	Staking or Guying Material	Wire	Turnbuckle or Flag
DECIDUOUS TREES			
1 1/2 to 3-1/2 in. caliper	2 in. x 2 in. cedar stake (3 required)	N/A	N/A
3-1/2 to 6 in. caliper	6 in. ground anchor or 6 in. diameter deadman by 2 ft. (3 required)	3/16 in. dia. triple stranded cable	5/16 in. by 4-1/2 in., galv. with flag
EVERGREEN TREES AND SHRUBS			
5 to 7 ft. height	2 in. x 3 in. by 3 ft. long wood stake (3 required)	1/8 in. dia. single stranded wire	3-1/2 in. with flag
7 to 12 ft. height	2 in. x 4 in. by 3 ft. long wood stake, or 4 in. ground anchor (3 required)	3/16 in. dia. triple stranded cable	8 in. with flag

2.07 ANTIDESICCANT

- A. Antidesiccant emulsion that will provide a protective film over plant surfaces, permeable enough to permit transpiration, delivered in containers with manufacturer's directions. Antidesiccant shall be 'Wiltpruf', manufactured by Nursery Specialty Products, Inc., Stubbins Road, Groton Falls, New York, or approved equivalent. Apply according to manufacturer's recommendations.

PART 3 – EXECUTION

3.01 PLANTING DATES

- A. Plant within the following dates:
 1. Evergreen Trees and Shrubs:
 - a. Spring: April 1 - June 1.
 - b. Fall: September 1 - November 1.
 2. Deciduous Trees and Shrubs:
 - a. Spring: April 1 - June 15.
 - b. Fall: October 1 - November 15.

3. Planting shall be prohibited in frozen or muddy ground.
- B. Special conditions may warrant a variance in the above dates. Contractor shall notify the Landscape Architect of the conditions and the proposed variance. Permission will be given if the variance is warranted.
- C. Approximate planting date schedules shall be furnished by Contractor to the Landscape Architect for approval. Material planted out-of-season shall be given extra care and attention by the Contractor. Out-of-season planting shall be performed entirely at the Contractor's risk.

3.02 EXCAVATION AND PREPARATION OF TREE PITS AND PLANTING BEDS

- A. Stake out on the ground locations for trees and outlines of all planting beds. Obtain approval of the Landscape Architect before excavation.
- B. If rock, utilities, tree roots, or obstructions are encountered in the excavation of shrub beds and tree pits, alternate locations may be selected by the Landscape Architect.
- C. Test drainage of plant beds and pits by filling with water twice in succession. Conditions permitting the retention of water for more than 24 hours shall be brought to attention of the Landscape Architect.
- D. Notify the Landscape Architect in writing of all soil or drainage conditions which the Contractor considers detrimental to the growth of plant material.
- E. Excavate tree pits and shrub beds to depths required. Tree pits shall be circular in outline. Tree pits shall be three times wider than the root ball diameter. Shrub, Perennial, and groundcover planting beds shall be provided to the depths indicated on the Drawings

3.03 PLANTING

- A. Place plants in the center of the holes. Use planting mix to backfill plant pits. Place planting mix in layers not to exceed 8 inches thick.
- B. Set the trunk flare of the plant slightly above the finish grade in the same relationship it was to the ground from which it was dug. Set plant plumb, turned to face best side of plant forward, and brace firmly in position until the planting mix has been tamped lightly around the ball and roots. When plant pits have been backfilled approximately two-thirds full, water thoroughly to eliminate air pockets before installing remainder of the planting soil. Cut ropes or wires from top two-thirds of ball after plant has been set. Cut away and remove all visible burlap wrapping from around root balls. Loosen surface soil of root ball and comb out any exposed roots. Remove synthetic wrap and slowly biodegradable materials completely.
- C. Form saucers, 3 inch deep, around tree pits and shrub beds.
- D. After placing each layer of planting mix, thoroughly water the planting mix in place, without disturbing or "puddling" the mix. After bringing soil in pit to grade and forming the planting saucer, thoroughly soak the tree pit by repeatedly filling the pit with water to the full depth of the saucer, allowing the water to completely percolate into the soil between

fillings. Water all plants immediately after planting. All plants shall be flooded with water twice within the first 24 hours of planting.

- E. Mulch all pits and beds to the required depth immediately after planting and first watering.

3.04 TREE SUPPORT

- A. Firmly stake or guy all trees immediately after planting as indicated on the Drawings. Plants shall stand plumb after staking or guying. Stakes shall be plumb and neat, and shall be installed in accordance with the details shown on the Drawings.

3.05 PRUNING

- A. Each tree and shrub shall be pruned in accordance with American Nurserymen Association Standards to preserve the natural character of the plant.
- B. Pruning shall include the following:
 1. Remove low branches as identified by the landscape Architect.
 2. Remove all dead wood, suckers, and broken or badly bruised branches. Never cut a leader.
 3. Use only clean, sharp tools.
- C. Apply antidesiccant to foliage if conditions warrant.

3.06 CLEAN-UP

- A. Soil or other material deposited on paved areas shall be promptly removed. Keep paved areas clean at all times.
- B. Upon completion of planting, all excess stones, debris, and soil shall be cleaned up and removed from the site.
- C. Broom and hose clean all pavements.

3.07 CARE AND MAINTENANCE DURING MAINTENANCE PERIOD

- A. The Contractor will be held responsible for all planted material, providing plant care for the duration of the Maintenance periods described below, until the project is completed and accepted. At the completion of the Maintenance period, all plants shall be in a healthy, growing condition and free from weeds or other noxious materials or conditions. Care shall include watering, weeding, cultivating, pruning, re-mulching, trimming, adjusting tightening and repairing of guys, removal of dead material, resetting plants to proper grades or upright position, and maintaining the planting saucer, furnishing and applying sprays required to keep the planting free of insects and disease and by performing other operations as required to keep plants healthy and growing.
- B. When directed by the Landscape Architect, pruning shall be in accordance with the ANSI standards for Class I, fine pruning, to preserve the natural character of the plant. All dead wood or suckers and all broken or badly bruised branches shall be removed. Do not cut leaders. The Landscape Architect shall determine if plants require pruning, or should be rejected. All pruning work shall be done by a Massachusetts Certified Arborist.

Contractor will submit a copy of the Arborist's current certification to the Landscape Architect.

- C. The Contractor shall be responsible for weeding around planted materials. All weeding shall be completed before acceptance of the project. At no time shall weeds attain the height of 6 inches during the period of contract prior to acceptance. Newly planted material must be clearly visible in order to be approved for Conditional and Final Acceptance.
- D. Watering
 - 1. All plantings shall be watered at least twice per week during Maintenance periods, from May 1 until September 15, from the day they are planted, during weeks where the average daily temperature exceeds 55 degrees (F) and when precipitation is less than 1 inch, as determined by local National Weather Service data. During weeks where the average temperature exceeds 90 degrees, the Contractor shall water more frequently. Watering shall be sufficient to provide moist soil to a depth of 6 inches, as determined by the Landscape Architect. If soil is sufficiently moist, as determined by the Landscape Architect, the required watering may be reduced.
 - 2. Trees will require a minimum of 10 gallons of water each, and shrubs a minimum of 5 gallons per plant per watering. Water shall always be applied slowly at the root ball to prevent runoff and erosion of soil.
 - 3. Trees or shrubs planted after October 15 shall be thoroughly watered at the time of planting and shall be watered until the first frost, after which subsequent watering will not be required until following season.
 - 4. Watering using individual drip irrigation bags will not be allowed without the written approval of the Owner.

3.08 MAINTENANCE PERIOD

- A. The Maintenance Period shall begin immediately after all plants are planted and shall continue for a minimum of 60 days following the completion of all planting installations, or until the provisional acceptance of all planting work, whichever is a longer period of time. During the 60 day Maintenance Period, plants shall be inspected for watering, weeding, and other requirements at least twice each week.
- B. Any decline in the condition of new plantings shall require the Contractor to take immediate action to identify potential problems and undertake corrective measures. If required, the Contractor shall immediately notify the Landscape Architect and engage professional arborists and/or horticulturists to inspect plant materials and to identify problems and recommend corrective procedures. Inspection and recommendation reports shall be submitted to the Landscape Architect.
- C. At the end of the Maintenance Period, the Contractor will request inspection by the Landscape Architect at least 10 days before the anticipated date of inspection.
- D. At the time of inspection, if the plant materials, workmanship, and maintenance practices are acceptable to the Landscape Architect, the date of the inspection shall establish the end of the Maintenance Period and the commencement of the required one-year Guarantee Period for planting work.

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- E. If in the Landscape Architect's opinion, plant materials, workmanship, or maintenance is deficient, acceptance will not be granted, and the Maintenance Period for all the plants shall be extended until plant replacements are made or other deficiencies are corrected. All dead, declining, or unsatisfactorily maintained plants shall be removed promptly from the project. Replacement plants shall conform in all respects to the Specifications for the original plants and shall be planted in the same manner.
- F. Absolutely no debris may be left on the site. The Contractor shall repair any damage to site as directed by the Landscape Architect, at no additional cost.

3.09 REJECTION AND REPLACEMENT

- A. Promptly remove dead and/or rejected plant material from site.
- B. As soon as planting conditions permit, any dead and unsatisfactory plants shall be replaced with plants of the same species/variety, and size with as originally approved for planting, or, on approval in writing by the Landscape Architect, by alternate or substitute varieties of plant material of equal value. Replacement plantings of evergreens shall be in place by October 15 and of deciduous by November 1. Replacement plantings shall conform to the provisions of this section, except the requirements for establishment.
- C. A final inspection of all plant material for acceptance will be held after the replacement planting has been completed.

3.10 ONE YEAR GUARANTEE INSPECTION

- A. One year after the date of Provisional Acceptance, and after replacement of any dead materials, the Contractor shall, at the request of the Owner, conduct an inspection of the condition of the plantings. Each plant shall show healthy growth on at least 85 percent of its terminal stems, as determined by the Landscape Architect. Determination of healthy growth shall include, but is not necessarily limited to, viable leaves (in season) and terminal buds, as well as live cambium.
- B. Plants found to be unacceptable shall be removed promptly from the site and replaced immediately or during the next normal planting season, as permitted by the specifications. The Landscape Architect will provide a written report on the results of the inspection. The Contractor shall replace any dead or unhealthy plants at this time, and a new One Year Guarantee shall commence for the replacement plants.
- C. For plants which are accepted, the Contractor shall prune any dead branches, as directed by the Landscape Architect or Owner.
- D. The Contractor shall remove tree support systems on nursery-grown plants at this time. Materials shall be disposed of off-site at no extra cost to the Contractor.

3.11 1 YEAR ESTABLISHMENT PERIOD

- A. The purpose of the Establishment Period is to nurture plants through at least one full growing season and one full winter. Planted areas shall be free of weeds and debris, and plantings shall be re-mulched as necessary. After provisional Acceptance of the plantings at

the end of the Maintenance period, maintenance shall continue as specified through the One Year Establishment period until Final Acceptance.

- B. The Contractor is responsible for arranging inspection early enough in the season to allow adequate time to procure and install replacement material. The Landscape Architect will inspect the replacement planting work upon the request of the Contractor. Request for inspection, shall be received by the Landscape Architect at least ten days before the anticipated date of inspection.
- C. At the end of the Establishment Period, each plant shall show healthy growth on at least 85 percent of its terminal stems, as determined by the Landscape Architect. Determination of healthy growth shall include, but is not necessarily limited to, viable leaves (in season) and terminal buds, as well as live cambium. Plants found to be unacceptable shall be removed promptly from the site and replaced immediately or during the next normal planting season, as permitted by the specifications.

END OF SECTION 329000

SECTION 329220
SEEDING AND SOD

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section specifies requirements for topsoil, loam borrow, seeding, and sodding for site landscape areas.
- B. The work includes:
 - 1. Furnishing, spreading, and fine grading of topsoil and loam borrow.
 - 2. Application of lime and fertilizers.
 - 3. Seeding, sodding, and hydromulching.
 - 4. Maintenance of seeded and sodded areas.

1.02 RELATED SECTIONS

- A. Sections which directly relate to the work of this Section include:
 - 1. Section 310000 – EARTHWORK
 - 2. Section 312500 – EROSION AND SEDIMENTATION CONTROLS
 - 3. Section 329000 – PLANTING

1.03 SUBMITTALS

- A. Manufacturers Product Data
 - 1. Submit material specifications and installation instructions where applicable attesting that the following materials meet the requirements specified:
 - a. Fertilizers, limestone, and other soil amendments
 - b. Seed mix – each type
 - c. Sod – each type
 - d. Wood cellulose fiber mulch
- B. Soil Test Reports
 - 1. Prior to ordering the loam borrow, soil test reports shall have been submitted to and approved by the Landscape Architect as specified under Section 329000 – PLANTING. Do not order materials until approval has been obtained. Delivered materials shall closely match the approved samples.
- C. Certificates
 - 1. A manufacturer's Certificate of Compliance to the specifications shall be submitted by the supplier with each shipment of each type of seed. These certificates shall include the guaranteed percentages of purity, weed content, and germination of the seed; the net weight of seed; and date of shipment. No seed shall be sown until the Contractor has submitted these certificates.

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- D. Maintenance Manual
 - 1. The Contractor shall submit a written manual prepared for the Owner that outlines a schedule for proper maintenance of the seeded and/or sodded lawns. This maintenance schedule should include timing and methods for mowing, watering, aeration, fertilization, liming, and other lawn maintenance operations.
- E. Submittal Schedule
 - 1. Before installation:
 - a. Manufacturer's product data for seed, sod, wood cellulose fiber mulch.
 - b. Soil test reports: Soil test reports shall have been submitted under the work of Section 329000 – PLANTING.
 - c. Seed certification.
 - d. Hydroseed mix.
 - 2. After installation and before acceptance
 - a. Maintenance Manual.

1.04 QUALITY ASSURANCE

- A. All work shall be performed by personnel experienced in lawn installation under the full-time supervision of a qualified foreman.
- B. Work shall be coordinated with all other trades on site. Seeded or sodded areas damaged by construction activities shall be repaired to newly installed condition by the Contractor at no additional cost to the Owner.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver material to the site in original unopened packages, showing weight, manufacturer's name, and guaranteed analysis.
- B. Store materials in a manner that their effectiveness and usability will not be diminished or destroyed. Materials shall be uniform in composition, dry, unfrozen, and free flowing. Any material which has become caked or otherwise damaged or which does not meet specified requirements will be rejected.

1.06 INSPECTION FOR ACCEPTANCE

- A. Conditions of Acceptance
 - 1. Acceptance shall be given for the entire portion of the lawn areas. No partial acceptance will be given.
 - 2. Lawns shall exhibit a uniform, thick, well-developed stand of grass. Lawn areas shall have no bare spots in excess of four inches in diameter and bare spots shall comprise no more than 2% of the total area of the lawn.
 - 3. Lawn areas shall not exhibit signs of damage from erosion, washouts, gullies, construction activities, or other causes.
 - 4. Pavement surfaces and site improvements adjacent to lawn areas shall be clean and shall be free of spills or overspray from placing or handling of topsoil and seeding operations.

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B. Inspection and Acceptance

1. After the minimum maintenance period, and upon written request of the Contractor, the Landscape Architect will inspect all lawn areas to determine completion of work. This request must be submitted at least five days prior to the anticipated inspection date.
2. If the lawn areas are not acceptable, the Landscape Architect will indicate corrective measures to be taken and shall extend the maintenance period as necessary for the completion of the work. The Contractor shall request a second inspection of the lawns after corrective measures have been accomplished. This process shall be repeated until the total lawn area being inspected is acceptable.
3. When the lawn areas are acceptable, a meeting of the Contractor and Owner's Representative will be arranged to accept the lawn work. A final inspection will be a part of this meeting. At this meeting, the Contractor shall be furnished with a written acceptance of the lawn section being approved. The Contractor shall turn over maintenance of the lawn areas to the Owner at this meeting.
4. Following the acceptance of lawns, the Contractor shall provide the Owner with access to all lawn areas as required for the Owner's maintenance work.

C. Site Cleanup

1. The Contractor shall leave the site in a clean and neat condition. Final acceptance will not be granted until this condition is met.

PART 2 – PRODUCTS

2.01 SOILS

- A. Topsoil/Loam shall conform to the requirements of Section 310000 – EARTHWORK OR Section 329000 – PLANTING.

2.02 SOIL CONDITIONING MATERIALS

- A. The formulation of all soil additives shall be in accordance with the recommendations of the soils testing report as specified under Section 329000 – PLANTING.
- B. Lime: Lime shall be an approved agricultural limestone containing no less than 50% total carbonates, and 25% total magnesium with a neutralizing value of at least 100%. The material shall be ground to such a fineness that 40% will pass through a No. 100 U.S. Standard Sieve, and 98% will pass through a No. 20 U.S. Standard Sieve. The lime shall be uniform in composition, dry and free flowing, and shall be delivered to the site in the original, unopened containers, each bearing the manufacturer's guaranteed analysis. Any lime that becomes caked or otherwise damaged (making it unsuitable for use) will be rejected.
- C. Fertilizer: Fertilizer shall be a complete, standard product complying with state and federal fertilizer laws. The fertilizer shall be uniform in composition, dry and free flowing, and shall be delivered to the site in the original, unopened containers, each bearing the manufacturer's guaranteed analysis, and submitted to the Landscape Architect for approval.
 1. Fertilizer shall contain the percentages recommended in the Soil Test reports submitted under Section 329000 – PLANTING. where not otherwise indicated by the Soils Testing

report recommendations, fertilizers shall provide the following minimum percentage of available plant nutrients by weight: 10% nitrogen, 10% phosphorus, 10% potash, in which 75% of the nitrogenous elements shall be derived from organic sources or ureaform.

- 2. Any fertilizer that becomes caked or otherwise damaged (making it unsuitable for use) will be rejected.
- D. Superphosphate: Superphosphate shall be composed of finely ground phosphate rock, as commonly used for agricultural purposes, and containing not less than 20% available phosphoric acid. Superphosphate shall be delivered to the site in the original, unopened containers, each bearing the manufacturer's guaranteed analysis and submitted to the Landscape Architect for approval. Any superphosphate that becomes caked or otherwise damaged (making it unsuitable for use) will be rejected.

2.03 WATER

- A. Water shall be furnished by the Contractor, suitable for irrigation, and free from ingredients harmful to plant life. Hoses and other watering equipment required for the work shall be furnished by the Contractor.

2.04 SEED

- A. Lawn Seed: Seed shall be: fresh, clean, and selected from the previous year's crop; shall have a maximum weed seed content of 1%; shall comply with applicable federal and state seed laws; and shall furnished and delivered premixed in unopened containers in the following proportions:

	Percent Proportion	Percent Germination Minimum	Percent Purity Minimum
1. FOR LAWNS:			
Creeping Red Fescue	50	85	95
Kentucky Bluegrass (improved varieties)	40	85	90
Manhattan Perennial Rye	10	90	95

- A. Specialty Seed Mixes:
 - 1. No-Mow Seed Mix shall be a low-growing seed mix consisting of approximately 6 varieties of creeping red fescues, No Mow Lawn Seed Mix, as supplied by Prairie Nursery, Westfield, WI, or approved equal by New England Wetland Plants, Ernst Seeds, Meadville PA, or approved equal supplier. Turf shall attain a maximum height of 8"-12".
 - 2. Detention Basin Erosion Control and Restoration Mix - Seed shall be a mix of a wide variety of native seeds that is suitable for ensuring rapid soil surface stabilization and permanent vegetation establishment for dry, recently disturbed sites. Seed mix Type 2 shall be one of the following or approved equal:
 - a. New England Detention Basin, Erosion Control and Restoration Mix, as supplied by New England Wetland Plants, Amherst, MA.
 - b. Detention Basin Mix, as supplied by Prairie Nursery, Westfield, WI.

- c. ERNMX-180 – Rain Garden Mix, as supplied by Ernst Seeds, Meadville PA.
- 3. Wildlife Seed Mix shall be a mix of a wide variety of native seeds that provide both good erosion control and wildlife habitat value. Mix shall consist of a minimum of 6 species of grasses, and 10 species of flowering perennials.
 - a. New England Conservation/Wildlife Mix, as supplied by New England Wetland Plants, Amherst, MA.
 - b. Detention Basin Mix, as supplied by Prairie Nursery, Westfield, WI.
 - c. ERNMX-153 – Showy Northeast Native Wildflower and Grass Mix, as supplied by Ernst Seeds, Meadville PA.
- 4. Wet Mix seed shall be a mix of a wide variety of native seeds that are suitable for wet meadow and wetlands replication sites that are typically moist throughout the growing season, but not permanently flooded. Wet Mix Seed Mix shall be one of the following, or approved equal seed mix:
 - a. New England Wet Mix, as supplied by New England Wetland Plants, Amherst, MA
 - b. Moist Meadow-Rain Garden Mix, as supplied by Prairie Nursery, Westfield, WI
 - c. ERNMX-122 – FACW Meadow Mix, as supplied by Ernst Seeds, Meadville PA

2.05 SOD

- A. Characteristics: Sod shall be well-rooted turf, free from weeds, insect pests, and disease. Sod shall be machine-cut to a uniform soil thickness of 3/4 inch plus or minus, and to industry standard length and widths. Sod shall be harvested and replanted within 36 hours. Soil on sod pads shall be kept moist at all times.
- B. Bluegrass Sod Composition: Nursery grown sod composed of an approximate blend of 50% Bluegrass, 50% Fescues, grown from seed mixture of the following varieties or approved equals:

Grass Species	Proportion of Seed by Weight
Midnight Kentucky Bluegrass	25%
Shamrock Kentucky Bluegrass	25%
Gotham Hard fescue	25%
Chewing Fescue (improved varieties)	10-15%
Creeping Fescue (improved varieties)	10-15%

- C. Turf-type Tall Fescue Sod Composition: Nursery grown sod composed of an approximate blend of 85% Fescues, 15% Bluegrass, grown from seed mixture of the following varieties or approved equals:

Grass Species	Proportion of Seed by Weight
Dakota Tall Fescue	25-30%
Montana Tall Fescue	25-30%
Tombstone Tall Fescue	25-30%
Kentucky Bluegrass - two improved varieties	15%

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2.06 HYDROMULCH

A. Wood Cellulose Fiber Mulch

1. Mulch to cover hydroseeded areas shall be fiber-processed from whole wood chips manufactured specifically for standard hydraulic mulching equipment. Fiber shall not be produced from recycled material such as sawdust, paper, or cardboard.
2. Moisture content shall not exceed 10%, plus or minus 3%, as defined by the pulp and paper industry standards. Fiber shall have a water holding capacity of not less than 900 grams of water per 100 grams fiber.
3. Mulch shall disperse into a uniform slurry when mixed with water. Mulch shall be nontoxic to plant life or animal life.
4. Mulch shall contain a non-petroleum based tackifier and a green dye for visual monitoring during application, but non-injurious to plant growth.

2.07 EROSION CONTROL MATTING FOR SLOPED AREAS

A. Matting for erosion control shall be provided on all slopes of 1 foot rise to 2 feet and steeper and shall consist of undyed and unbleached smolder resistant jute yarn woven into a uniform, open, plain weave mesh. Jute matting shall be furnished in rolled strips and shall conform to the following:

1. Width: 48 inches, plus or minus one inch.
2. 78 warp ends per width of cloth.
3. 41 weft ends per yard.
4. Weight: To average between 1.22 lbs. and 1.80 lbs. per linear yard.
5. Tolerance: plus or minus 5%

B. Stakes for pegging erosion control matting shall be sound hardwood approximately 1 inch by 3 inches. Stakes shall be free from insects and fungi and capable of remaining intact in the ground for at least two years.

2.08 HYDROSEED MIX

A. The Contractor shall submit a certified statement as to number of lbs. of fertilizer, amounts and types of grass seed, and processed fiber, per 100 gallons of water.

PART 3 – EXECUTION

3.01 SEED BED PREPARATION

- A. Grade all lawn areas to finish grades as indicated on the Drawings. When no grades are shown, areas shall have a smooth and continual grade between existing or fixed controls and elevations shown on Drawings. Roll, scarify, and rake as required to obtain uniform, even lawn surfaces. All lawn areas shall slope to drain. Finish grades shall be approved by the Engineer.
- B. If no new loam borrow is required, thoroughly loosen soil in areas to be seeded or sodded to a minimum depth of 6 inches with approved power or hand equipment. Remove rocks,

debris, clods and other undesirable substances, and maintain grading and drainage patterns.

- C. When Loam Borrow is required, place Loam Borrow on previously scarified subsoil to a minimum depth of 6 inches. Subsoil shall be cleaned of debris and stones larger than 2 inches prior to Loam Borrow spreading.
- D. Apply fertilizer, superphosphate, and lime, at rates recommended by the testing agency and approved by the Landscape Architect. Thoroughly and evenly incorporate fertilizer and lime into the soil to a depth of 3 inches by discing or other approved methods. In areas inaccessible to power equipment, fertilizer and lime shall be incorporated into the soil by manual methods. At existing trees, the depth shall be adjusted to avoid disturbance of the tree roots.
- E. Seeding shall be done immediately after final grading, provided the bed has remained in a good, friable condition, and has not become muddy or compacted. Any undulations or irregularities in the surface resulting from fertilizing, liming, tilling, or other causes, shall be regraded prior to seeding. The surface shall be free of stones, cleared of all trash, debris, roots, brush, wire, grade stakes, and other objects that would interfere with establishment of lawn and lawn maintenance operations.

3.02 HYDROSEED BED PREPARATION

- A. Prepare seed bed for hydroseeding the same as for seeding, but do not incorporate fertilizer into the top 3 inches of Loam Borrow.
- B. Hydroseeding shall be applied with a spray machine designed for this purpose and approved by the Landscape Architect.

3.03 SEEDING

- A. Seeding shall be done between April 1 to June 1, or between August 15 to October 15, except as otherwise authorized in writing by the Landscape Architect.
- B. All disturbed areas not covered by buildings, paving, or otherwise developed, shall be seeded.
- C. Seeding shall not be done during windy or inclement weather.

3.05 HYDROSEEDING

- A. Designated areas shall be hydroseeded only after written approval of the finished grading by the Engineer.
- B. Except for native seeding areas, and where otherwise indicated by the Soils Testing Report recommendations, fertilizer shall be added to the hydroseeding slurry at the rate of 5 lbs. per 1,000 square feet.
- C. Seed shall be added to the hydroseeding slurry at the rate of 75 lbs. per acre.
- D. Wood cellulose fiber mulch shall be added to the hydroseeding slurry at the rate of 2 tons per acre.

- E. A mobile tank with a capacity of at least 500 gallons shall be filled with water, and the required amounts of seed, wood cellulose mulch, and fertilizer. The slurry shall be thoroughly mixed by means of positive agitation in the tank. The slurry shall be applied by means of a centrifugal pump using the turret or hose application technique from the mobile tank. The hose or turret shall be equipped with a seeding nozzle of a proper design to ensure even distribution of the solution over the area to be seeded and shall be operated by a person thoroughly familiar with this type of seeding operation.

3.06 MAINTENANCE AND PROTECTION

- A. Maintenance of seeded areas shall begin immediately after installation and shall continue for a minimum 60 day maintenance period, linked to the 60 day Planting Maintenance period as specified under Section 329000 - PLANTING. Lawn maintenance shall continue until the date of Preliminary Acceptance of the work of Planting or until acceptance of the seeded lawns, whichever is later.
- B. Maintenance shall include watering, weeding, mowing and edging, reseeding, disease and insect pest control, repair of all erosion damage, and any other procedures consistent with good horticultural practice, required to ensure normal, vigorous, and healthy growth. Maintenance shall continue until final acceptance of the work.
- C. Maintenance shall also include all temporary protection fences, barriers, signs, and all other work incidental to proper maintenance.
- D. Scattered bare spots will be allowed up to a maximum of 2% of any lawn area, provided none are larger than 4 inches in diameter. After the grass has sprouted, all bare areas shall be re-seeded or re-sodded repeatedly until all areas are covered with a satisfactory growth of grass. At the time of the first cutting, lawn should be mowed not less than 2-1/2 inches high. Do not remove more than one-third of the grass blade. All lawns shall receive at least five mowings before acceptance.
- E. The seeded and sodded areas shall be maintained in a continuous moist condition, satisfactory for good germination and growth of grass until acceptance.
- F. Six weeks after the seeded areas have become established, unless otherwise recommended by the Soils Testing Lab report, fertilizer shall be applied over the entire area. Seed shall be fertilized at the time of the second mowing.
- G. Acceptance Requirements:
 - 1. At the end of the Maintenance period, the Contractor shall request that the Landscape Architect inspect the seeded lawn areas, in accordance with Part 1 of this Section. Landscape Architect's inspection shall determine whether maintenance shall continue in any part.

END OF SECTION 329220

SECTION 334000
STORM DRAINAGE UTILITIES

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section specifies requirements for furnishing and installing the site storm drainage utilities system, as indicated on the Drawings and as specified herein.
- B. The work shall include but not be limited to the following:
 - 1. Site storm drainage system.
 - 2. Connection of building drains from a point five feet (5 ft.) outside of the building or structure foundation.
 - 3. Underground stormwater detention and infiltration facilities.

1.02 RELATED SECTIONS

- A. Carefully examine all of the Contract Documents for requirements which affect the Work in this Section. Other specification sections, which directly relate to the Work of this section include, but are not limited to, the following:
 - 1. Section 018900 – SITE CONSTRUCTION PERFORMANCE REQUIREMENTS
 - 2. Section 033055 – CAST-IN-PLACE CONCRETE (SITE)
 - 3. Section 312319 – DEWATERING
 - 4. Section 312500 – EROSION AND SEDIMENTATION CONTROL
 - 5. Section 310000 – EARTHWORK

1.03 REFERENCE STANDARDS

- A. References herein are made to the following Standards:
 - 1. American Society for Testing and Materials (ASTM):
 - A48 Standard Specification for Gray Iron Castings
 - A615 Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
 - C32 Standard Specification for Sewer and Manhole Brick
 - C39 Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
 - C62 Standard Specification for Building Brick
 - C76 Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
 - C139 Standard Specification for Concrete Masonry Units for Construction of Catch Basins and Manholes

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C144	Standard Specification for Aggregate for Masonry Mortar
C150	Standard Specification for Portland Cement
C207	Standard Specification for Hydrated Lime for Masonry Purposes
C270	Standard Specification for Mortar for Unit Masonry
C443	Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets
C478	Standard Specification for Circular Precast Reinforced Concrete Manhole Sections
C990	Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants
D2665	Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings
D3034	Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings
D3350	Standard Specification for Polyethylene Plastics Pipe and Fittings Materials
D4884	Standard Test Method for Strength of Sewn or Bonded Seams of Geotextiles
F477	Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe
F667	Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings
F2418	Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers

1.04 SUBMITTALS

A. Shop Drawings

1. Shop drawings or descriptive literature, or both, showing dimensions, joint and other details of all materials proposed for the work. Shop drawings shall be submitted to the Engineer for approval prior to ordering material.

B. As-Built Drawings

1. The Contractor shall take measurements during construction of:
 - a. Horizontal location of all drainage structures. Horizontal location shall be by survey location using the same coordinate system as the Project, or three (3) (minimum) ties to nearby permanent structures.
 - b. Elevations of all inverts using Project Benchmarks.
2. As-Built Drawings shall be submitted to the Engineer upon completion of the work.
3. As-Built Drawings shall be complete and shall indicate the true measurement and location, horizontal and vertical, of all new drainage system construction. As-Built drawings shall include a minimum of three (3) ties showing the distance to each catch basin and manhole from fixed permanent objects. As-Built Drawings shall also contain

any additional information required by the municipality and shall be stamped with the seal of a licensed Land Surveyor or licensed Professional Engineer.

1.05 QUALITY ASSURANCE

- A. Work shall comply with the State Rhode Island Plumbing Code.

1.06 COORDINATION AND VERIFICATION

- A. Coordinate the work with the termination of storm drain connections at buildings, connections to municipal systems, and trenching operations.
- B. The Contractor shall field verify and survey the size, location and elevations of all existing pipe and utility lines prior to ordering of materials for this utility system. A report of the findings of the verification survey shall be submitted to the Engineer for information and comment.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. All materials shall be adequately protected from damage during transit. Pipes shall not be dropped.
- B. All pipe and other appurtenances shall be inspected before placement in the work and any found to be defective from any cause, including damage caused by handling, and determined by the Engineer to be unrepairable, shall be replaced at no cost to the Owner.
- C. Storage and handling of pipes, manholes, catch basins, oil-grit separators, treatment units and other system appurtenances shall be in accordance with the manufacturer's recommendations.

1.08 INSPECTION

- A. The manufacturer/supplier is responsible for the provision of all test requirements specified for each type of pipe. In addition, any pipe may be inspected at the plant for compliance with these specifications by an independent testing laboratory selected and paid by the Owner. The Contractor shall require the manufacturer's cooperation in these inspections.
- B. Inspection of the pipe may also be made after delivery. The pipe shall be subject to rejection at any time on account of failure to meet any of the specification requirements, even though pipe samples may have been accepted as satisfactory at the place of manufacture. Pipe rejected after delivery shall be marked for identification and shall be removed from the site at once.

PART 2 – PRODUCTS

2.01 GENERAL

- A. All materials for storm drainage utilities system shall be new and unused.

2.02 FILTER FABRIC

- A. Filter Fabric shall be Mirafi 140N or approved equivalent.

2.03 HIGH DENSITY CORRUGATED POLYETHYLENE (HDPE) PIPE

- A. HDPE pipe and fittings shall be smooth interior and meet the requirements of ASTM D3350. Four-inch through 10-inch diameter HDPE pipe shall meet the requirements of AASHTO M 252. Twelve-inch through 60-inch diameter HDPE pipe shall meet the requirements of AASHTO M 294, Types S.
- B. Standard Fitting connections shall be fabricated to sizes shown on the Drawings.
- C. Pipe joints and fittings shall conform to the requirements of AASHTO M 252 or AASHTO M 294. Pipe joints shall be Bell and Spigot soil tight joints and gaskets shall meet the requirements of ASTM F477. Fittings shall also be soil tight and gasketed.

2.04 STORM DRAIN MANHOLES

- A. Precast Concrete
 1. Manholes shall be 48-inch minimum inside diameter, precast concrete units, 4,000 psi minimum compressive strength, with eccentric cone section tapering to 24-inch diameter and monolithic base section meeting the requirements of ASTM C478. All structures shall be designed for HS-20 loading and shall be sufficient diameter to accept the pipe penetrations indicated on the Drawings.
 2. Precast unit joint seals shall be preformed butyl rubber O-ring type seals meeting the requirements of ASTM C990.
 3. Openings for pipe and materials to be embedded in the walls of the manholes sections for joint seals shall be cast in the sections at the required locations during manufacture. Sections with incorrectly cast and patched pipe openings will be rejected.
 4. Openings shall be cast into the manhole sections to receive entering pipes during manufacture. The openings shall be sized to provide a uniform 2-inch maximum annular space between the outside of the pipe wall and the opening in the riser for RCP. The openings shall be sized to accommodate flexible boot connections for all other pipe materials.
 5. Manhole pipe openings shall be solidly filled with non-shrink mortar for RCP.
 6. Manhole pipe connections for all other pipe materials shall be flexible boots as manufactured by Press-Seal, Trelleborg, A-Lok or approved equivalent.

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- B. Unit Masonry Construction:
 - 1. Brick shall be sewer brick conforming to ASTM C32, Grade MS or building brick conforming to ASTM C62, Grade SW.
 - 2. Concrete block shall be solid block and shall conform to the ASTM C139.
 - 3. Mortar shall be in conformance with ASTM C270, Type M. The mortar shall be composed of Portland cement hydrated lime, and sand, in the proportions of 1 part cement to 1/4 part hydrated lime to 3-1/2 parts sand by volume.
 - 4. Cement shall be Type I or II Portland cement conforming to ASTM C150. Where masonry is exposed to salt water, Type II shall be used.
 - 5. Hydrated lime shall be Type S conforming to ASTM C207.
 - 6. Sand for masonry mortar shall conform to the gradation requirements of ASTM C144.
- C. Steps: Steps for manholes shall be steel reinforced copolymer polypropylene plastic step with at least a 14-inch wide stepping surface conforming to ASTM C478 and ASTM A615.

2.05 MANHOLE FRAME AND COVER

- A. Grey iron casting conforming to ASTM A48, heavy duty, with word "DRAIN" embossed on cover. Letter size shall be three inches (3 in.). Frame and cover shall have a minimum clear opening of 24 inches and have a minimum weight of 475 pounds. Frame and cover shall be East Jordan Iron Works 2114Z/2110A, or approved equal.

2.06 CATCH BASINS

- A. Precast catch basins and drop inlets shall be manufactured in accordance with ASTM C478 (4,000 psi minimum compressive strength) to the diameters and depths shown on the Drawings. All structures shall be designed for HS-20 loading. Precast unit joints shall be sealed with butyl rubber in accordance with ASTM C990.
- B. Where required for hood, a slot and opening shall be cast in the catch basin wall for mounting the cast iron hood over the outlet pipe.
- C. When approved by the Engineer, catch basins and drop inlets may be constructed with brick or concrete block walls and poured reinforced concrete bases as an alternative to precast concrete units.
- D. Brick and concrete block and other materials shall conform to Article 2.03B.

2.07 CATCHBASIN FRAMES AND GRATES

- A. Catchbasin frame and grates shall be cast iron, conforming to ASTM A48, Class 30. Where located in accessible ways, grate openings shall meet the requirements of federal, state, and local regulations adopted under the Americans with Disabilities Act (ADA).

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- B. Single catch basin frame and grate shall be EJ 5546Z / 5520M5 or approved equivalent with four flanges, or with three flanges for use with gutter inlet or abutting vertical curb. Frame and grate for catch basin with shallow cover shall be EJ 5525Z / 5520M5 or approved equivalent.
- C. Double catch basin frame and grate shall be EJ 5448Z / 5520M5 or approved equivalent, with four flanges, or with three flanges for use with gutter inlet or abutting vertical curb.

2.08 CATCHBASIN HOODS

- A. Catch basin oil and debris traps (i.e., hoods, eliminators, etc.) shall be manufactured by the following, or approved equivalent:
 - 1. 'Eliminator' by Ground Water Rescue, Inc.
 - 2. 'Hood' by Neenah Foundry Company

2.09 AREA DRAINS

- A. Area drains shall be 'NYLOPLAST' drain basin with cast ductile iron grate manufactured by ADS.

2.10 STORMWATER DETENTION CHAMBERS

- A. Stormwater detention pipes shall be ADS N-12 30", manufactured by ADVANCE DRAINAGE SYSTEMS, INC. (ADS)
 - 1. Chambers shall meet ASTM F2418 and the structural design shall be in accordance with AASHTO Section 12.12.
 - 2. The pipes shall be manufactured of high-density polypropylene (HDPE).
 - 3. The nominal dimensions of each pipe shall be in accordance with the manufacturer's standard.
 - 4. End sections and header pipe shall be provided to connect the units to the site drainage.

2.11 STORMWATER INFILTRATION CHAMBERS

- A. Stormwater detention chambers shall be STORMTECH SC-740, manufactured by Advanced Drainage Systems, Inc. (ADS)
 - 1. Chambers shall meet ASTM F2418 and the structural design shall be in accordance with AASHTO Section 12.12.
 - 2. The units shall be manufactured of high-density polypropylene (HDPE) with open bottoms and perforated sidewalls.
 - 3. The nominal dimensions of each chamber shall be in accordance with the manufacturer's standard.
 - 4. Each chamber shall interlock with the adjacent chamber by overlapping the first rib.

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5. End sections and header pipe shall be provided to connect the units to the site drainage.

2.12 SILT SACKS/SEDIMENT CONTROL DEVICES

- A. Manufacturer: ACF Environmental, Inc.; or approved equal.
- B. Material shall be a polypropylene geotextile fabric with strength per ASTM D4884.

PART 3 – EXECUTION

3.01 GENERAL

- A. Contractor shall verify the location, size invert and type of existing pipes at all points of connection prior to ordering new utility materials.
- B. All pipe shall be laid accurately to the lines and grades shown on the Drawings and in conformance with the pipe manufacturer's recommendations.
- C. As soon as the trench is excavated to the normal grade of the bottom of the trench, the Contractor shall immediately place the bedding material in the trench. The pipe shall be firmly bedded in the compacted bedding material accurately to the lines and grades shown on the Drawings.
- D. Laying Pipe: Each length of pipe shall be laid with firm, full and even bearing throughout its entire length, in a prepared trench. Pipe shall be laid with bells upgrade unless otherwise approved by the Engineer.
 1. Each length of pipe shall be laid with firm, full and even bearing throughout its entire length, in a prepared trench. Pipe shall be laid with bells upgrade unless otherwise approved by the Engineer.
 2. Every length of pipe shall be inspected and cleaned of all dirt and debris before being laid. The interior of the pipe and the jointing seal shall be free from sand, dirt and trash. Extreme care shall be taken to keep the bells of the pipe free from dirt and rocks so that joints may be properly lubricated and assembled. No pipe shall be trimmed or chipped to fit.
 3. No length of pipe shall be laid until the proceeding lengths of pipe have been thoroughly embedded in place, to prevent movement or disturbance of the pipe alignment.
 4. Bedding shall be notched under pipe bells and joints where required to provide for uniform bearing under entire length of pipe.
- E. Optimum moisture content of bedding material shall be maintained to allow required compaction density.
- F. Where an existing pipe is to be extended, the same type of pipe shall be used, unless otherwise approved by the Engineer.

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- G. Only full lengths of pipe shall be used in the installation except that partial lengths of pipe may be used at the entrance to structures, and to accommodate the required locations of service connection fittings.
- H. All pipes entering drainage structures shall be cut flush with the inside face of the structure, and the cut ends of the pipe surface within the structure shall be properly rounded and finished so that there will be no protrusion, ragged edges or imperfections that would impede the hydraulic characteristics of the stormwater flow. The method of cutting and finishing shall be subject to the approval of the Engineer.
- I. The Contractor shall protect the installation at all times during construction. Movement of construction equipment, vehicles, and loads over and adjacent to any pipe shall be performed at the Contractor's risk.
- J. At all times when pipe laying is not in progress, all open ends of pipes shall be closed by approved temporary watertight plugs. If water is in the trench when work is resumed, the plug shall not be removed until the trench has been dewatered and all danger of water entering the pipe eliminated.

3.02 RELATIONSHIP TO WATER MAINS

- A. When a drain pipe crosses above or below a water pipe, the following procedures shall be utilized:
 - 1. *Horizontal Separation:* Whenever possible drains shall be laid at a minimum of 5 feet horizontally from any existing or proposed water main. Should local conditions prevent a lateral separation of 5 feet, a drain may be laid closer than 5 feet to a water main if:
 - a. It is laid in a separate trench, or if
 - b. It is laid in the same trench with the water mains located at one side on a bench of undistributed earth, and if
 - c. In either case the elevation of the top (crown) of the drain is at least 12 inches below the bottom (invert) of the water main.
 - 2. *Vertical Separation:* Whenever drains must cross under water mains, the drain shall be laid at such an elevation that the top of the pipe is at least 12 inches below the bottom of the water main. When the elevation of the drain cannot be varied to meet the above requirements, the water main shall be relocated to provide this separation or reconstructed with mechanical-joint pipe for a distance of 10 feet on each side of the drain. One full length of water main should be centered over the drain so that both joints will be as far from the sewer as possible.
 - 3. When it is impossible to obtain the horizontal and vertical separation stipulated above, both the water main and drain shall be constructed of mechanical-joint cement lined ductile iron pipe or other equivalent based on water tightness and structural soundness. Both pipes shall be pressure tested by an approved method to assure water tightness.

3.03 EXCAVATION AND BACKFILLING FOR PIPES

- A. The type of materials to be used in bedding and backfilling and the method of placement shall conform to the requirements of Section 310000 - EARTHWORK (SITE), the details shown on the Drawings and the following.
- B. Embedment materials are those used for bedding, haunching and initial backfill around pipes as illustrated on the Drawings.
 - 1. All embedment materials should be free from lumps of frozen soil or ice when placed. Embedment materials should be placed and compacted at optimum moisture content
- C. Trench Bedding: Material must be provided to insure proper line and grade is maintained. Unsuitable or unstable materials shall be undercut and replaced with a suitable bedding material, placed in 6 inch lifts. Other methods of stabilization, such as geotextiles may be appropriate and their use must be approved by the Engineer or Owner's Representative.
 - 1. Provide a stable and uniform bedding for the pipe and any protruding features of its joints and/or fittings. The middle of the bedding equal to 1/3 of the pipe outside diameter should be loosely placed, with the remainder compacted to a minimum of 95 percent Modified Proctor Density.
- D. Haunching: Proper haunching provides a major portion of the pipe's strength and stability. Exercise care to insure placement and compaction of the embedment material in the haunches. For larger diameter pipes (pipes greater than 30 inch diameter), embedment materials should be worked under the haunches by hand. Haunching materials shall be placed and compacted in 6 inch maximum lifts, compacted to 95 percent Modified Proctor Density.
- E. Initial Backfill: The initial backfill shall be from the springline to 24 inches above the pipe to provide protection for the pipe from construction operations during placement of the final backfill and protect the pipe from stones or cobbles in the final backfill. Compact initial backfill per Section 310000 - EARTHWORK (SITE).
 - 1. Flooding or jetting as a procedure for compaction are not allowed.
- F. Final Backfill: The final backfill should be the same material as the proposed embankment or surface finishes. Generally, the excavated material may be used as final backfill. Placement should be as specified for the embankment. In lieu of a specification, the final backfill should be placed in 12 inch maximum lifts and compacted to a minimum 95 percent modified proctor density to prevent excessive settlement at the surface. Compaction should be performed at optimum moisture content.
- G. Vehicular and Construction Loads: During construction, avoid heavy equipment loads (greater than 40,000 lbs. per axle) over the pipe. Additional temporary cover should be placed over the pipe for heavy construction load crossings. Hydrohammers or hoe-pak compactors may not be used over the pipe until at least 48 inches of cover have been provided.

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3.04 MANHOLES, CATCH BASINS, AND DROP INLETS - PRECAST

- A. Manholes Catch Basins and Drop Inlets: Shall be constructed at the locations and to the lines, grades, dimensions and design shown on Drawings or as required by the Engineer.
- B. Precast Concrete Units: Shall be installed in a manner that ensures watertight construction and all leaks in precast concrete structures shall be sealed. If required, precast concrete structures shall be repaired or replaced to obtain watertight construction.
- C. Stubs shall be short pieces of pipe cut from the bell ends of the pipe. Stubs shall be plugged with brick masonry unless otherwise directed by the Engineer.
- D. Manhole Inverts shall conform accurately to the size of the adjoining pipes.
 - 1. Manhole inverts shall be constructed of 3,500 psi concrete as shown the Drawings.
 - 2. Inverts shall be laid out in smooth diameter curves of the longest possible radius to provide uniform flow channels.
 - 3. Invert shelves shall be graded with a 1 inch drop per one foot length sloped from the manhole walls.
- E. Manhole steps shall be accurately positioned and embedded in the concrete when the section is cast. Precast reinforced concrete manhole sections shall be set vertical and with sections and steps in true alignment.
- F. All holes in sections used for their handling shall be thoroughly plugged with rubber plugs made specifically for this purpose, or with mortar. The mortar shall be one part cement to 1-1/2 parts sand, mixed slightly damp to the touch, hammered into the holes until it is dense and an excess of paste appears on the surface, and finished smooth and flush with the adjoining surfaces.
- G. Precast sections shall be level and plumb with approved joint seals. Water shall not be permitted to rise over newly made joints until after inspection and acceptance. All joints shall be watertight.
- H. Openings which have to be cut in the sections in the field shall be carefully made to prevent damage to the riser. Damaged risers will be rejected and shall be replaced at no additional cost to the Owner.

3.05 CHANGE IN TYPE STRUCTURES

- A. Where indicated on the Drawings, existing subsurface drain structures shall be converted to the new structure types in the following manner:
 - 1. Catch Basins to Manholes
 - a. Fill basin sump with 3,000 psi concrete and create new inverts at the elevations and sizes indicated and in accordance with specifications and details for new drain manholes.
 - b. Provide and adjust to grade new drain manhole frame and cover.

- c. Stockpile existing frame and grade per Owner's directions.
- 2. Manholes to Catch Basins or Drain Inlets
 - a. Where a sump is indicated on the Drawings, replace existing manhole structure with new precast concrete catch basin structure.
 - b. Where a sump is not indicated on the Drawings, replace existing frame and cover with new frame and grate and adjust to grade per these specifications and details for new catch basins.
 - c. Stockpile existing manhole frame and cover per Owner's directions.

3.06 BRICK MASONRY

- A. Brick masonry structures shall be watertight. All leaks in brick masonry structures shall be sealed. All brick masonry shall be laid by skilled workmen.
- B. All beds on which masonry is to be laid shall be cleaned and wetted properly. Brick shall be wetted as required to be damp, but free of any surface water when placed in the work. Bed joints shall be formed of a thick layer of mortar which shall be smoothed or furrowed slightly. Head joints shall be formed by applying a full coat of mortar on the entire brick end, or on the entire side, and then shoving the mortar covered end or side of the brick tightly against the bricks laid previously. The practice of buttering at the corners of the brick and then throwing the mortar or crappings in the empty joints will not be permitted. Dry or butt joints will not be permitted. Joints shall be uniform in thickness and approximately 1/4 inch thick.
- C. Brickwork shall be constructed accurately to the required structure dimensions and tapered at the top to the dimensions of the flanges of the cast-iron frames, as shown on the Drawings.
- D. Joints on the inside face of walls shall be tooled slightly concave with an approved jointer when the mortar is thumbprint hard. The mortar shall be compressed with complete contact along the edges to seal the surface of the joints.
- E. All castings to be embedded in the brickwork shall be accurately set and built-in as the work progresses.
- F. Water shall not be allowed to flow against brickwork or to rise on the masonry for 60 hours after it has been laid, and any brick masonry damaged in this manner shall be replaced as directed at no additional cost to the Owner. Adequate precautions shall be taken in freezing weather to protect the masonry from damage by frost.

3.07 CONCRETE MASONRY UNITS

- A. Concrete masonry units shall be soaked in water before laying. As circular concrete block walls are laid-up, the horizontal joints and keyways shall be flushed full with mortar. As rectangular blocks are laid-up, all horizontal and vertical joints shall be flushed full with

mortar. Plastering of the outside of block structures will not be required. No structure shall be backfilled until all mortar has completely set.

3.08 MANHOLE STEPS

- A. Steps shall be cast into the precast walls during manufacture.
- B. Steps in brick masonry and concrete units shall be installed as the masonry courses are laid.

3.09 CASTINGS

- A. Cast-iron frames for grates and covers shall be well bedded in cement mortar and accurately set to the proposed grades.
- B. All voids between the bottom flange and the structure shall be completely filled to make a watertight fit. A ring of mortar, at least one-inch (1 in.) thick and pitched to shed water away from the frame shall be placed over and around the outside of the bottom flange. The mortar shall extend to the outer edge of the masonry all around its circumference and shall be finished smooth. No visible leakage will be permitted.
- C. Structures within the limits of bituminous concrete pavement shall be temporarily set at the elevation of the bottom of the binder course. After the binder course has been compacted, the structures shall be set at their final grade. Backfill necessary around such structures after the binder course has been completed shall be made with 3,500 psi concrete.

3.10 CONNECTIONS TO EXISTING FACILITIES

- A. General Requirements: The Contractor shall make all required connections of the proposed drainage system into existing drainage system, where and as shown on the Drawings.
- B. Compliance with requirements of Owner of Facility: Connections into existing drainage system facilities shall be performed in accordance with the requirements of the Owner of the facility. The Contractor shall comply with all such requirements, including securing of all required permits, and paying the costs thereof.

3.11 MANHOLE CONNECTIONS

- A. Manhole pipe connections for precast manhole bases shall be a tapered hole filled with non-shrink waterproof grout for RCP. Manhole connections shall be flexible boot cast into the manhole wall for HDPE, PVC, and DIP. The stainless-steel clamp shall be protected from corrosion with a bitumastic coating.

3.12 ROOF DRAIN OR SIMILAR CONNECTIONS

- A. General Requirements: The Contractor shall make all required connections of the building drainage system pipes into the site drainage system at locations and at distances from the buildings as shown on the Drawings. If stubs are constructed for later connection to the building pipes, the ends shall be sealed with watertight plugs and marked with 2 x 4 risers for later location.
- B. Coordination with Building Contractor: The Contractor shall coordinate the work with the work of the building contractor to determine the exact location and elevation of the point of entry into the building.
- C. Connections: Roof drain connections to the site drainage utilities system shall be made with fittings supplied by the pipe manufacturer.

3.13 INFILTRATION SYSTEMS CONSTRUCTION

- A. Infiltration systems shall consist of any of the following and combinations thereof:
 - 1. Chambers, plastic or concrete pipes, etc.
 - 2. Ponds constructed for this purpose.
 - 3. Precast concrete leaching structures.
- B. For the long-term function of the infiltration system, the Contractor shall:
 - 1. Prevent the infiltration basin from being used as a construction sediment basin without prior approval of the Engineer.
 - 2. Direct stormwater runoff from exposed surfaces away from the infiltration basin.
 - 3. Ensure that construction equipment, vehicular traffic, parking of vehicles, and stockpiling of construction materials shall be outside of the infiltration system area.
 - 4. Ensure that the soil at the bottom of the infiltration system excavation is not compacted or smeared.
 - 5. Ensure that the perimeter of the infiltration system is staked and flagged to prevent the use of the area for activities that might damage the infiltration ability of the system.

3.14 CLEANING

- A. The Contractor shall clean the entire drainage system of all debris and obstructions. Cleaning shall include removal of all formwork from structures, concrete and mortar droppings, construction debris, and dirt. The system shall be thoroughly flushed clean, and the Contractor shall furnish all necessary hose, pumps, pipe and other equipment that may be required for this purpose. No debris shall be flushed into existing drains, storm recharge chambers, storm drains and/or streams.

3.15 TESTING

- A. Testing shall be done with a mandrel with a minimum length that is greater than the pipe diameter, and a minimum diameter of 90 percent of the pipe diameter. If the mandrel cannot be pulled through the pipe after seven (7) days of completed trench backfill, the pipe line shall be deemed unacceptable and the pipe lines shall be removed and replaced.
- B. The Contractor shall make all necessary repairs or replacements required to permanently provide an open and structurally sound drainage system capable of supporting the anticipated loading from all sources throughout the year.

3.16 FINAL INSPECTION

- A. Upon completion of the work, and before final acceptance by the Engineer, the entire drainage system shall be subjected to a final inspection in the presence of the Engineer. The work shall not be considered as complete until all requirements for line, grade, cleanliness, mandrel tests, and other requirements have been met.

END OF SECTION 334000

SECTION 334020
WARNING AND TRACER TAPE

PART 1 – GENERAL

1.01 WORK INCLUDED

- A. This Section covers the furnishing, handling, and installation of warning and tracer tape, as called for on the Drawings.

1.02 SUBMITTALS

- A. In accordance with requirements of General Specifications, submit the following:
 - 1. Six sets of manufacturer's literature on the materials, colors and printing specified herein, shall be submitted to the Engineer for review.
 - 2. Tape samples shall also be submitted to the Engineer for review.

PART 2 – PRODUCT

2.01 ACCEPTABLE MANUFACTURERS

- A. Tape shall be manufactured by: Terra-Tape and Terra-Tape D by Reef Industries, Houston, TX; Markline and Detectatape by Allen Systems, Houston, TX; an equivalent tape by Industrial Tape and Supply Company, Atlanta, GA; or approved equal.

2.02 TAPE

- A. Warning and tracer tape shall be at least 6 inches wide.
- B. Tracer tape for non-ferrous pipe or conduit shall be constructed of a metallic core bonded to plastic layers. The metallic tracer tape shall be a minimum 5-mil thick and shall be located at a depth as indicated on the drawings.
- C. Warning tape for ferrous pipe or conduit shall consist of multiple bonded plastic layers. The non-metallic tracer tape shall elongate at least 500% before breaking.
- D. The tape shall bear the wording (or approved equivalent): 'BURIED DRAIN LINE BELOW' (with 'DRAIN' replaced by 'WATER', 'SEWER', 'ELECTRICAL', 'GAS', 'TELEPHONE', or 'CHEMICAL' as appropriate), continuously repeated every 30 inches to identify the pipe.
- E. Tape colors shall be as follows as recommended by the American Public Works Association (APWA):

Electric
Gas and Oil
Communications
Water
Sewer and Drain
Chemical

Red
Yellow
Orange
Blue
Green
Red (not APWA)

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Warning and tracer tape shall be installed above the pipe or conduit it is to identify at depths as indicated on the Drawings.
- B. Follow the manufacturer's recommendations for installation.

END OF SECTION 334020

SECTION 347113
VEHICLE BARRIERS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section includes furnishing and installing vehicle barriers as indicated on the Drawings and as specified herein, including but not limited to the following:
 - 1. Wood guardrail.
 - 2. Concrete-filled steel pipe bollards.

1.02 RELATED SECTIONS

- A. Sections which directly relate to the work of this Section include:
 - 1. Section 310000 – EARTHWORK.
 - 2. Section 033055 – CAST-IN-PLACE CONCRETE (SITE).

1.03 SUBMITTALS

- A. Submit to the Engineer for approval, two complete sets of shop drawings for materials. No materials shall be fabricated or shipped prior to approval of shop drawings by the Engineer.
- B. A certificate of wood treatment shall be furnished to the Engineer upon delivery of the treated wood products. Treated wood shall bear the appropriate American Wood Protection Association (AWPA) quality mark for the treatment employed. The certificate shall indicate acceptability of treated wood to receive field-applied stain.
- C. Submit layout plan for single faced wood guardrail showing post locations, including end and closure posts.

1.04 QUALITY ASSURANCE

- A. Posts and offset blocks that contain unsound knots and shakes, excessive checking, or other defects that may be detrimental to the structural integrity of the completed guardrail system will be rejected and shall not be used.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Wood Guardrail
 - 1. Rails shall be of the same timber species as the post, and shall be stress grade 1,000 psi or more, extreme fiber in bending.

2. Post and rails shall be treated with a wood preservative as specified in Article 2.01B. Minimum net retention shall be 0.40 lbs./cubic foot.
 3. Posts and rails shall be predrilled and cut to the required dimensions prior to treatment.
 4. Bolt holes shall be 1/16 inch larger than bolt thread diameter.
 5. All treated posts shall be marked in accordance with AWPAs Standards M1 and M6. The posts shall also be stamped with the inspector's identification in accordance with AWPAs Standard M2.
- B. Bollards
1. Bollard pipe material shall be six (6) inch diameter standard steel pipe, unless otherwise indicated on the Drawings, filled and anchor encased with 3,000 psi cement concrete.

PART 3 – EXECUTION

3.01 WOOD GUARDRAIL

- A. Posts shall be set in excavated holes at the required spacing. Layout spacing of posts in the field prior to excavating post holes. End and closure posts at bends shall be spaced as follows: spacing shall be 4 ft. minimum and 8 ft. maximum.
- B. Furnish and install post required to accommodate the steel highway guard terminal section at end post. Field bore holes to insure proper attachment of steel terminal section to wood rail and post.
- C. The bottom of post holes shall be tamped to grade. Post shall be set plumb at the required location.
- D. Post holes shall be backfilled with suitable material placed in layers and compacted.
- E. Wood rails shall be erected to form a smooth continuous rail conforming to the required line and grade. Butt adjoining rail sections with separation between adjoining rail sections 1/16 inch maximum.
- F. Rails shall be butt jointed at alternate posts or as directed, and shall be securely attached with galvanized carriage bolts, at least two per rail per post, of sufficient length to secure with washer and nut. Hammering or other forceful method of inserting bolt will not be permitted. Rail splices and terminal section connections shall occur only at posts.
- G. Wood surfaces, cut or injured, and field boxed in wood posts or rails shall be treated with two brush-applied coatings of wood preservative using material of the same specifications as that used in the preservative treatment.

3.02 CONCRETE-FILLED STEEL PIPE BOLLARD

- A. Install concrete-filled steel pipe bollards at locations indicated on the Drawings in accordance with the applicable details.

END OF SECTION 347113

Appendix A – CAP Alteration and Soil Management Compliance Work Plan



July 21, 2020

Ref: 72634.04

Ms. Ashley Blauvelt
Rhode Island Department of Environmental Management
Office of Land Revitalization & Sustainable Materials Management
235 Promenade Street
Providence, Rhode Island 02908

Re: CAP Alteration and Soil Management Compliance Work Plan
Providence Redevelopment Agency
Assessor's Plat 27, Lots 293, 285, and 286
50 Sims Avenue, 460 Kinsley Avenue, and 23 Charlotte Hope Street
Providence, Rhode Island
RIDEM Case No. 2006-074

Ms. Blauvelt,

On behalf of the Providence Redevelopment Agency (PRA), Vanasse Hangen Brustlin, Inc. (VHB) submits this CAP Alteration and Soil Management Compliance Work Plan (CAP Alteration/SMP) in accordance with the existing Environmental Land Usage Restriction (ELUR) for the referenced property (i.e., the Site) and recent email communications between VHB and the Rhode Island Department of Environmental Management (RIDEM) Office of Land Revitalization and Sustainable Materials Management (LR&SMM) on July 13 and 15, 2020. A Site Locus Map is provided as **Figure 1**.

The PRA plans to re-develop the majority of the currently vacant Site into a shared parking lot for general public use, for use by the neighboring Farm Fresh Food Hub currently in construction, and by future tenants of the Site building once building renovations are completed in the near future. Currently the ground surfaces of the Site serve as a CAP and are a combination of aged and newer asphalt, former building foundation slabs, and gravel/trap rock. The proposed parking lot development project will require removal of the existing ground surfaces and existing soils within the project limits to achieve certain grades to accommodate the new parking lot components and amenities and to facilitate installation of the new CAP/Engineered Barrier in said disturbed areas. The project is expected to start in late summer/early fall 2020 and is expected to be substantially completed by the end of 2020.

The ELUR (copy with associated Soil Management Plan provided in **Attachment A**) is applicable to the entire property defined in ELUR Exhibits A and 2A, and exists to restrict certain Site activities and access to underlying Site soils which are known to be contaminated with various compounds of concern, specifically, total petroleum hydrocarbons (TPH), heavy metals, polycyclic aromatic hydrocarbons (PAHs).

1 Cedar Street
Suite 400
Providence, RI 02903
P 401.272.8100
F 401.277.8400

Engineers | Scientists | Planners | Designers

In accordance with the provisions of the ELUR, alterations of the engineered controls in place at the Site and disturbances of underlying Site soils are prohibited unless approved by RIDEM and performed in accordance with the SMP. To support the PRA's request for RIDEM approval of this CAP Alteration/SMP, VHB is providing details relative to the following in the sub-sections below::

- Limited Site Investigation Activities Completed;
- Proposed Areas of Disturbance and CAP Details/Specifications;
- Proposed Public Notice;
- Construction Monitoring and Soil Management;
- Closure Reporting; and
- Anticipated Project Schedule and Project Contact Information.

In response to this request, VHB anticipates the Department will issue a Program Letter outlining the proposed CAP replacement and soil remediation work and requiring that a public notice letter be sent to abutters and local officials. Upon completion of a 14-day public comment period and proper documentation that any comments/questions received have been adequately addressed, a combined Remedial Decision Letter (RDL)/Remedial Approval Letter (RAL) for this CAP Alteration and SMP will be issued for the project.

Limited Subsurface Investigation Activities: January – April 2020

On behalf of the PRA, and in support of this project, VHB completed limited subsurface investigations (LSIs) between January and April 2020 consisting of test pitting, soil borings, groundwater monitoring well installations and associated soil and groundwater sampling. The January 2020 LSI was summarized in a Memorandum submitted to RIDEM on February 21, 2020, a copy of which is provided in **Attachment B**. Additional LSI activities focused on evaluating Site soils for disposal pre-characterization parameters and on delineating the extent of elevated lead concentrations in the central-southern portion of the Site (i.e., in vicinity of Area 6) in March and April 2020. These additional LSI findings (written summary, updated data summary tables, and Site mapping) were presented to RIDEM via email communications on July 13, 2020. A PDF copy of VHB's correspondence with RIDEM and the RIDEM email response dated July 15, 2020 is being provided in **Attachment C**.

In general, RIDEM has agreed that the LSIs completed to date have adequately supplemented the historical data set for the Site and are sufficient to facilitate the proposed CAP Alterations and SMP provisions. RIDEM agrees that stormwater infiltration is permitted at the Site with the exception of the area referred to as Area 6 where TCLP – Lead analyses indicated levels greater than 5 milligrams per liter (mg/L). The CAP for that area of the Site will be impervious. RIDEM also indicated their intended regulatory approval process for the project will be as outlined above (i.e., submittal of this work plan, public notice, followed by issuance of RDL/RAL).

Proposed Areas of Disturbance and CAP Details/Specifications

Although some final details regarding the exact placement of parking spots, crosswalks, etc. are still being finalized, the location of impervious pavement, areas of stormwater infiltration, and the Limits of Disturbance (LOD) are not expected to vary and are shown on the current Design Plan for the Municipal Parking Lot included in **Attachment D**. All new CAPs constructed as part of the project will generally comply with one of the CAP designs illustrated in the Engineered Controls shown in **Attachment E**. For areas where the CAP will include a geotextile fabric for the purposes of soil separation, Mirafi 140N is suggested (copy of product specifications included in **Attachment E**), but another product with similar or higher quality performance specifications may be used upon approval of the environmental professional.

Please note that any areas of the Site that fall outside the LOD for this project, and therefore not replaced with a new CAP, will continue to be evaluated annually and maintained as needed in accordance with the ELUR.

Proposed Public Notice

As indicated by RIDEM (refer to **Attachment C**) and upon issuance of a Program Letter, VHB will prepare and send a Public Notification Letter to abutters and local officials on behalf of the PRA outlining the proposed CAP alterations and remedial activities and soliciting comments and/or questions relative to the technical feasibility of the remedy over a 2-week comment period. The letters will be sent via regular USPS mail delivery. A mailing list of proposed recipients and a Draft copy of the letter will be submitted to the Office of LR&SMM for review and approval prior to mailing. At the conclusion of the comment period, all relevant questions and comments related to the technical feasibility of the proposed remedial activities will be addressed in a public notice summary to be prepared by VHB on behalf of the PRA. Upon Department receipt and approval of the public notice summary letter, an RDL/RAL will be issued to PRA for the project.

Construction Monitoring & Soil Management

Construction monitoring and soil management practices will follow the previously approved SMP (refer to **Attachment A**) as reiterated or supplemented/modified in the subsections below:

- **Soil Excavation, Characterization, and Stockpiling**

Soil excavation will be conducted by appropriately trained and licensed contractors with monitoring by a VHB environmental professional. Existing asphalt and concrete surface coverings will be removed and segregated for proper off-Site disposal. Underlying soils will then be excavated to lower the existing Site grades to accommodate the new parking lot components. In general, approximately 1-2 feet of existing Site soil within the project limits will need to be excavated and disposed off-Site, with the exception of soils in the vicinity of Area 6 where elevated TCLP- Lead concentrations have been identified and in areas where infiltration/utility structures are designed to be installed. Soils beneath

the pavement in the portion of Area 6 within the defined limits of elevated Pb (i.e., where TCLP > 5.0 mg/L), will be left in place to the extent practical. If excavation and off-Site disposal in Area 6 is deemed necessary, then full time professional monitoring by an environmental scientist will be implemented to ensure the hazardous material from Area 6 is minimized and properly segregated, characterized, and disposed at a facility licensed to accept hazardous soil.

In general, all Site soils have already been characterized for a full suite of disposal parameters, including VOCs, SVOCs, heavy metals, TPH, PCBs, reactivity, pH, flashpoint, ignitability, and free liquids. A tabular summary of the characterization data was provided in **Attachment C**. Upon receipt of RIDEM approval of this CAP Alteration and SMP, VHB will prepare and submit a soil disposal application package to the Rhode Island Resource Recovery Corporation to dispose of excess soils generated from all project areas with the exception of the area within Area 6 where elevated TCLP – Lead concentrations have been identified.

Best soil management practices will be employed at all times. Regulated soils will either be live-loaded for off-Site disposal or will be segregated from unregulated soils (e.g. imported, “clean” soils used in new CAP construction – see below) and stockpiled on existing impervious surfaces or existing regulated soils and covered by an overlapping and secured layer of polyethylene sheeting in an approved laydown area within the Site prior to appropriate disposal at a licensed facility. The polyethylene sheeting will be of a minimum thickness of 6-mil. Stockpiles will also be surrounded with appropriate erosion controls to protect against stormwater and/or wind erosion (e.g. straw waddles, hay bales, silt fencing, etc.). No regulated soil will be stockpiled on-Site for longer than 90 days without prior RIDEM approval.

Some areas of the Site that are governed by the ELUR may lie outside of the LOD for this project. Disturbances of the existing cap-in-place or remedial activities in those areas are not anticipated; however, said areas will continue to be evaluated by the PRA (or by VHB on the PRA’s behalf) to ensure the existing caps-in-place are properly maintained. Said evaluations will be provided in annual ELUR Evaluation Summary Reports as have been submitted for the ELUR-regulated property since the ELUR was first recorded.

- **Off-Site Disposal**

For this project, based on preliminary discussions with the RIRRC, VHB anticipates disposing of the majority of excess regulated soils to the RIRRC facility in Johnston, RI as Contaminated Soil. If applicable and approved by the RIRRC, some soil may be disposed as Alternative Daily Cover material. Also, a limited amount of soil excavated from Area 6, if any, will likely need to be disposed of out-of-state at a facility licensed to accept hazardous soil. A Material Shipping Record (MSR) or Bill of Lading (BOL) will be used to track shipments of soil to the disposal facility and copies of the completed MSRs or BOLs along with facility weight slips will be included in a Closure Report to be submitted at the completion of the project.

- **Clean Fill Certification and Import**

The SMP (refer to **Attachment A**), indicates that any clean fill soils (e.g., loam, structural gravel, etc.) used to create the CAP at the Site will be sampled and analyzed for TPH, VOCs, SVOCs, and Total PP13 Metals at a frequency of 1 sample per every 1,000 cubic yards. For this project, VHB proposes and requests approval that clean fill sampling be conducted at a frequency of 1 sample per every 500 yards (collected via 6-point composite at the material source location) and analyzed for total arsenic. Additionally, ¼ of all samples collected for each type of fill material will also be analyzed for a full suite of parameters that includes TPH, VOCs, PAHs, and Total PP13 Metals. The analytical results will be compared to the RIDEM Method 1 Residential Direct Exposure Criteria (RDEC) and certified by VHB to be less than said criteria or otherwise non-jurisdictional prior to importation to the Site. Copies of the laboratory reports for the soils sampled and imported for CAPPING at the Site meet RIDEM RDEC will be included in the Closure Report.

- **Dewatering/Groundwater Management**

Based upon the previously collected site investigation data and the anticipated depths of excavation necessary for this project, groundwater is not expected to be encountered during construction, and therefore, no groundwater management, treatment, or disposal activities are included in this work plan. In the event that unanticipated dewatering of any deeper excavations is required, the groundwater will be properly containerized, characterized, and managed/disposed off-Site as appropriate.

- **Health and Safety**

VHB has prepared a Site-specific OSHA-required Health and Safety Plan (HASP) for use by VHB personnel while on-Site performing observation/monitoring activities during the project. Although VHB will not be providing full-time observations and will not be providing overall health and safety monitoring for the project, VHB will provide a copy of our HASP to the contractor if requested for their reference and to facilitate development of their own HASP for their workers and subcontractors. VHB will also specify that only Site workers with 40-hour OSHA Hazwoper Certification are allowed to perform Site duties when potentially exposed to Site contamination. A copy of VHB's site-specific HASP is included as **Attachment F**.

- **Dust Control**

If conditions are such that persistent fugitive dust is apparent during excavation activities, dust suppression (e.g. watering, etc.) techniques will be initiated by the Contractor. If overt odors are generated during site activities, air monitoring and means to control odors will be utilized by the Contractor, as appropriate.

- **Equipment/Vehicle Decontamination**

All non-disposable equipment used during the soil disturbance activities (e.g., shovels, backhoe bucket) will be properly decontaminated via brushing prior to removal from the Project Area. A stone construction entrance will be created, and truck wheels will be brushed off as needed to minimize the potential to track Site soils onto nearby roadways. In the event that any Site soils are inadvertently tracked on to roadways, said soils will be swept up and returned to the Site in a timely manner.

- **Operations Log and Photo-Documentation**

When on-Site for periodic Site observations and monitoring, VHB will complete an Operations Log describing general Site activities in progress; the status of soil management operations such as stockpiling, loading, transporting, of contaminated soils; the effectiveness of stockpile covers and erosion controls and the need, if any, for maintenance; observations of dust or unusual odors; and health and safety concerns observed, if any. A copy of the Operations Log Template that will be used by VHB is provided as **Attachment G**.

VHB will also take progress photos and field measurements of the newly installed CAP during our periodic Site visits to document compliance with this CAP Alteration and Soil Management Plan.

Copies of the Operations Logs and progress photos will be included in a Closure Report to be submitted at the completion of the project.

Closure Reporting

Following the completion of the proposed activities as outlined above, VHB will submit a Remedial Action Closure Report (RACR) to the RIDEM detailing compliance with the provisions of this work plan. The RACR will include a narrative description of the work and copies of applicable laboratory reports, transportation and disposal paperwork, Operations logs, and photo-documentation illustrating progress and compliance as stated above. An updated Post-Construction Soil Management Plan documenting the new CAP construction and soil management provisions to be followed during any additional future intrusive activities will be included with the RACR.

Schedule and Project Contact Information

This Project is scheduled to begin in the late summer of 2020 and is expected to be substantially completed by the end of 2020. VHB will provide a minimum of 3 business days' notice and a list of contractors and environmental professionals who will be performing the work and environmental monitoring with contact information. VHB anticipates submittal of the RACR in early 2021.

Ashley Blauvelt
Ref: 72634.04
July 21, 2020
Page 7

On behalf of the PRA, VHB trusts that this submittal and supporting attachments are satisfactory for the purposes of complying with the ELUR and the Department's requirements for approval and issuance of a Program Letter for the project. If any additional information is required, or if you have any questions, please contact the undersigned at your convenience. VHB respectfully requests a timely approval of this submittal to facilitate the anticipated RFP, contractor selection, and construction schedule.

Sincerely,

Vanasse Hangen Brustlin, Inc.



Fred T. Bevans
Environmental Scientist
fbevans@vhb.com



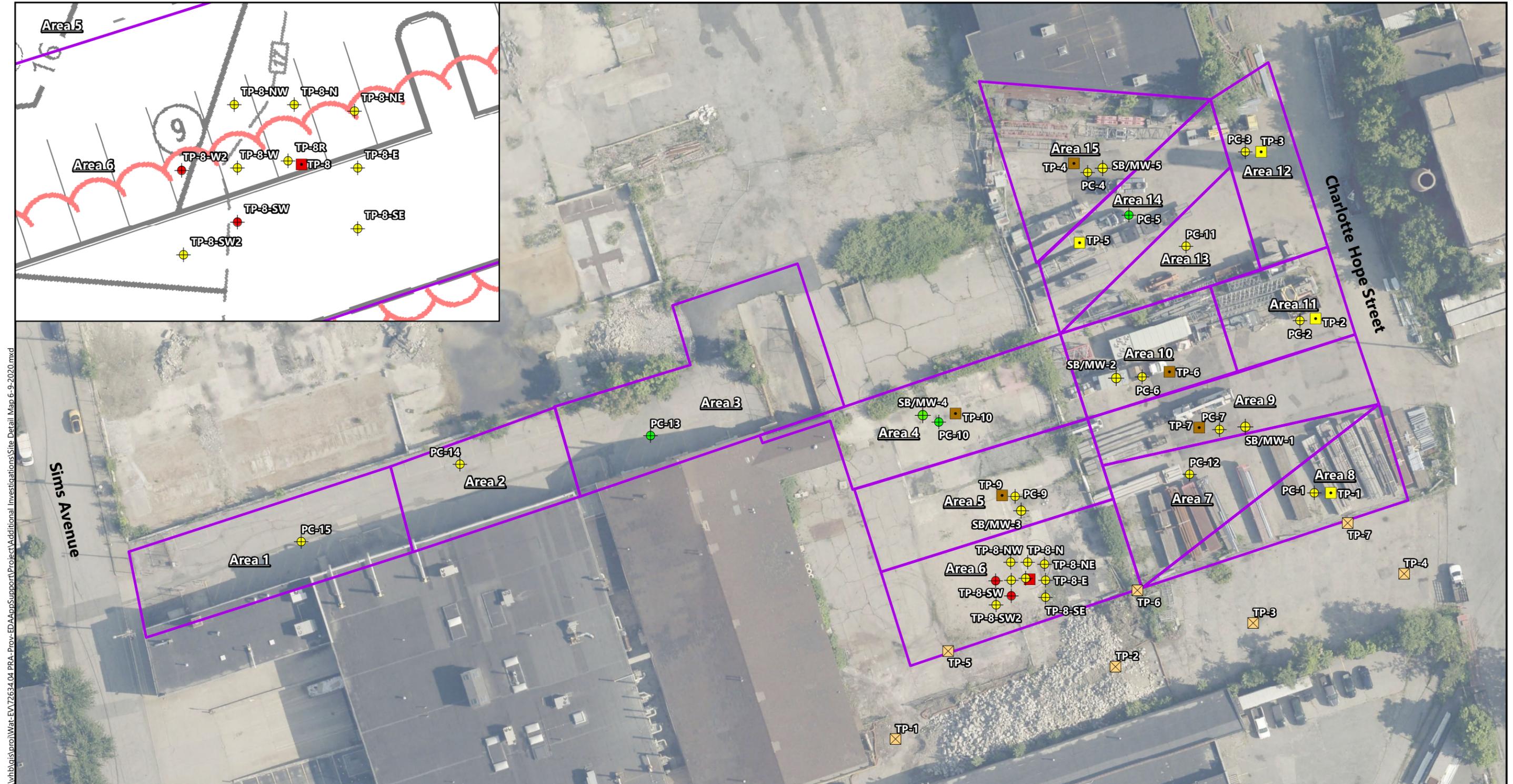
Peter M. Grivers, P.E., LSP
Remediation Team Leader
pgrivers@vhb.com

Attachments:

- Figure 1: Site Locus Map
- Attachment A: 2017 ELUR
- Attachment B: LSI Memo -2/21/2020
- Attachment C: VHB-RIDEM Communications – 7/13/2020 to 7/15/2020
- Attachment D: Municipal Parking Lot – Design Plan
- Attachment E: Engineered Control Sections and Geotextile Product Specifications
- Attachment F: Copy of VHB HASP
- Attachment G: Operations Log Template

cc: Samuel Budway, Providence Redevelopment Agency

Figure 1: Site Locus Map



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- | | | | |
|--|---|--|---|
| | SB does not exceed applicable RIDEM Method 1 Criteria | | TP not Sampled |
| | SB exceeds applicable RIDEM Method 1 Criteria | | TP exceeds applicable RIDEM Method 1 Criteria |
| | SB Exceeds applicable USEPA MCCTC Standard | | SB Exceeds applicable USEPA MCCTC Standard |
| | | | Historical TPs |
| | | | Pre-Char. Grid Areas |

Limited Site Investigation

50 Sims Ave. Providence, RI

Additional Soil Investigations

Source: RIDEM Aerial Photo (Summer 2019)

Attachment A: Copy of 2012 ELUR

ENVIRONMENTAL LAND USAGE RESTRICTION

This Declaration of Environmental Land Usage Restriction ("Restriction") is made on this 10th day of August, 2017 by the Providence Redevelopment Agency, and its successors and/or assigns (hereinafter, the "Grantor").

WITNESSETH:

WHEREAS, the Grantor is the Owner in fee simple of certain real property identified as **[Plat 27, Lot(s) 293, 285, and 286 with respective addresses of 50 Sims Avenue, 460 Kinsley Avenue, and 23 Charlotte Hope Street in Providence, Rhode Island (the "Property")**, more particularly described in Exhibit A (Legal Descriptions) which is attached hereto and made a part hereof;

WHEREAS, the Property (identified in the ELUR Site Map which is attached hereto as Exhibit 2A and is made a part hereof) has been determined to contain soil which is contaminated with certain Hazardous Materials in excess of applicable **industrial/commercial Direct Exposure Criteria** pursuant to the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases ("Remediation Regulations");

WHEREAS, the Grantor and the Department have determined that the environmental land use restrictions set forth below are consistent with the regulations adopted by the Rhode Island Department of Environmental Management ("Department") pursuant to R.I.G.L. § 23-19.14-1 and that this restriction shall be a Conservation Restriction pursuant to R.I.G.L. § 34-39-1 et. seq. and shall not be subject to the 30-year limitation provided in R.I.G.L. § 34-4-21;

WHEREAS, the Department's written approval of this Restriction is contained in the document entitled: **Remedial Approval Letter** issued pursuant to the Remediation Regulations;

WHEREAS, to prevent exposure to or migration of Hazardous Substances and to abate hazards to human health and/or the environment, and in accordance with the **Remedial Approval Letter**, the Grantor desires to impose certain restrictions upon the use, occupancy, and activities of and at the **Property**;

WHEREAS, the Grantor believes that this Restriction will effectively protect public health and the environment from such contamination; and

WHEREAS, the Grantor intends that such restrictions shall run with the land and be binding upon and enforceable against the Grantor and the Grantor's successors and assigns.

NOW, THEREFORE, Grantor agrees as follows:

A. Restrictions Applicable to the Property: In accordance with the **Remedial Approval Letter**, the use, occupancy and activity of and at the **Property** is restricted as follows:

- i. No residential use of the **Property** shall be permitted that is contrary to Department

approvals and restrictions contained herein;

- ii. No groundwater at the **Property** shall be used as potable water;
- iii. No soil at the **Property** shall be disturbed in any manner without written permission of the Department's Office of Waste Management, except as permitted in the Remedial Action Work Plan (RAWP) or Soil Management Plan (SMP) approved by the Department in a written approval letter dated November 15, 2010, Exhibit B and attached hereto;
- iv. Humans engaged in activities at the **Property** shall not be exposed to soils containing Hazardous Materials and/or petroleum in concentrations exceeding the applicable Department approved Direct Exposure Criteria set forth in the Remediation Regulations;
- v. The engineered controls at the **Property** described in the **SMP** contained in Exhibit B attached hereto shall not be disturbed and shall be properly maintained to prevent humans engaged in **industrial/commercial** activity from being exposed to soils containing Hazardous Materials and/or petroleum in concentrations exceeding the applicable Department-approved **industrial/commercial** Direct Exposure Criteria in accordance with the Remediation Regulations; and

B. No action shall be taken, allowed, suffered, or omitted at the Property if such action or omission is reasonably likely to:

- i. Create a risk of migration of Hazardous Materials and/or petroleum;
- ii. Create a potential hazard to human health or the environment; or
- iii. Result in the disturbance of any engineering controls utilized at the **Property**, except as permitted in the Department-approved **SMP** contained in Exhibit B.

C. Emergencies: In the event of any emergency which presents a significant risk to human health or to the environment, including but not limited to, maintenance and repair of utility lines or a response to emergencies such as fire or flood, the application of Paragraphs A (iii.-viii.) and B above may be suspended, provided such risk cannot be abated without suspending such Paragraphs and the Grantor complies with the following:

- i. Grantor shall notify the Department's Office of Waste Management in writing of the emergency as soon as possible but no more than three (3) business days after Grantor's having learned of the emergency. (This does not remove Grantor's obligation to notify any other necessary state, local or federal agencies.);
- ii. Grantor shall limit both the extent and duration of the suspension to the minimum period reasonable and necessary to adequately respond to the emergency;
- iii. Grantor shall implement reasonable measures necessary to prevent actual, potential, present and future risk to human health and the environment resulting from such

suspension;

- iv. Grantor shall communicate at the time of written notification to the Department its intention to conduct the Emergency Response Actions and provide a schedule to complete the Emergency Response Actions;
- v. Grantor shall continue to implement the Emergency Response Actions, on the schedule submitted to the Department, to ensure that the **Property** is remediated in accordance with the Remediation Regulations (or applicable variance) or restored to its condition prior to such emergency. Based upon information submitted to the Department at the time the ELUR was recorded pertaining to known environmental conditions at the **Property**, emergency maintenance and repair of utility lines shall only require restoration of the **Property** to its condition prior to the maintenance and repair of the utility lines; and
- vi. Grantor shall submit to the Department, within ten (10) days after the completion of the Emergency Response Action, a status report describing the emergency activities that have been completed.

D. Release of Restriction; Alterations of Subject Area: The Grantor shall not make, or allow or suffer to be made, any alteration of any kind in, to, or about any portion of the **Property** inconsistent with this Restriction unless the Grantor has received the Department's prior written approval for such alteration. If the Department determines that the proposed alteration is significant, the Department may require the amendment of this Restriction. Alterations deemed insignificant by the Department will be approved via a letter from the Department. The Department shall not approve any such alteration and shall not release the **Property** from the provisions of this Restriction unless the Grantor demonstrates to the Department's satisfaction that Grantor has managed the **Property** in accordance with applicable regulations.

E. Notice of Lessees and Other Holders of Interests in the Property: The Grantor, or any future holder of any interest in the **Property**, shall cause any lease, grant, or other transfer of any interest in the **Property** to include a provision expressly requiring the lessee, grantee, or transferee to comply with this Restriction. The failure to include such provision shall not affect the validity or applicability of this Restriction to the **Property**.

F. Enforceability: If any court of competent jurisdiction determines that any provision of this Restriction is invalid or unenforceable, the Grantor shall notify the Department in writing within fourteen (14) days of such determination.

G. Binding Effect: All of the terms, covenants, and conditions of this Restriction shall run with the land and shall be binding on the Grantor, its successors and assigns, and each Owner and any other party entitled to control, possession or use of the **Property** during such period of Ownership or possession.

H. Inspection & Non-Compliance: It shall be the obligation of the Grantor, or any future holder of any interest in the **Property**, to provide for annual inspections of the **Property** for

compliance with the ELUR in accordance with Department requirements.

A qualified environmental professional will, on behalf of the Grantor or future holder of any interest in the **Property**, evaluate the compliance status of the **Property** on an annual basis. Upon completion of the evaluation, the environmental professional will prepare and simultaneously submit to the Department and to the Grantor or future holder of any interest in the **Property** an evaluation report detailing the findings of the inspection, and noting any compliance violations at the **Property**. If the **Property** is determined to be out of compliance with the terms of the ELUR, the Grantor or future holder of any interest in the **Property** shall submit a corrective action plan in writing to the Department within ten (10) days of receipt of the evaluation report, indicating the plans to bring the **Property** into compliance with the ELUR, including, at a minimum, a schedule for implementation of the plan.

In the event of any violation of the terms of this Restriction, which remains uncured more than ninety (90) days after written notice of violation, all Department approvals and agreements relating to the **Property** may be voided at the sole discretion of the Department.

I. Terms Used Herein: The definitions of terms used herein shall be the same as the definitions contained in Section 3 (DEFINITIONS) of the Remediation Regulations.

IN WITNESS WHEREOF, the Grantor has hereunto set (his/her) hand and seal on the day and year set forth above.

Providence Redevelopment Agency

By:

Grantor (signature)

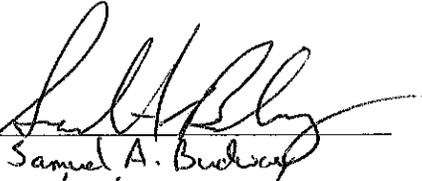
Grantor (typed name)

Bonnie Nickerson

STATE OF RHODE ISLAND
COUNTY OF PROVIDENCE

In (Providence), in said County and State, on the 10th day of August, 2017, before me personally appeared Bonnie Nickerson, to me known and known by me to be the party executing the foregoing instrument and (he/she) acknowledged said instrument by (him/her) executed to be (his/her) free act and deed.

Notary Public:


Samuel A. Budnick

My Comm. Expires:

06/24/2020

ELUR Exhibit A - Legal Descriptions - property subject to this ELUR is described by attached Exhibit A excepting the portion described as "A.P. 27, Lot 292 - 345 Harris Ave"

Property Description of A.P. 27 Lot 293 (50 Sims Ave.), Lot 285 (460 Kinsley Ave.), and Lot 286 (23 Charlotte Hope St.)

That parcel of land situated in Providence, Rhode Island bounded and described as follows:

Beginning at a point in the easterly line of Sims Avenue one hundred ten and 12/100 feet (110.12') northerly of the intersection of Sims Avenue and Harris Avenue;

Thence N05°41'05"E bounded westerly by Sims Avenue a distance of three hundred ninety two and 60/100 feet (392.60') to a point;

Thence N89°58'20"E bounded northerly by land now or formerly of MLG Kinsley Ave LLC a distance of three hundred forty five and 93/100 feet (345.93') to a point;

Thence N00°06'30"E bounded westerly by last named land a distance of thirty six and 29/100 feet (36.29') to a point;

Thence S89°53'30"E bounded northerly by last named land a distance of eighty three and 18/100 feet (83.18') to a point;

Thence N00°09'00"W bounded westerly by land now or formerly of MLG Kinsley Ave LLC. a distance of fifty eight and 70/100 feet (58.70') to a point;

Thence N86°39'45"E bounded northerly by last named land a distance of one hundred twenty three and 86/100 feet (123.86') to a point;

Thence S67°58'37"E bounded northeasterly by land now or formerly of Twin Realty Company a distance of one hundred thirty six and 42/100 feet (136.42') to a point;

Thence N74°18'23"E bounded northwesterly by last named land a distance of thirty eight and 71/100 feet (38.71') to a point in the westerly line of Charlotte Hope Street;

Thence S00°28'03"W bounded easterly by Charlotte Hope Street a distance of three hundred thirty seven and 23/100 feet (337.23') to a point;

Thence N89°32'25"W bounded southerly by last named land a distance of one hundred twelve and 11/100 feet (112.11') to a point;

Thence S89°57'35"W bounded southerly by last named land a distance of two hundred five and 63/100 feet (205.63') to a point;

Thence S00°02'25"E bounded easterly by last named land a distance of two hundred twenty five and 00/100 feet (225.00') to Harris Avenue;

Thence S89°57'35"W bounded southerly by Harris Avenue a distance of one hundred twenty eight and 87/100 feet (128.87') to a point;

Thence N00°02'25"W bounded westerly by land now or formerly of FWD Realty Corp. a distance of one hundred twenty nine and 48/100 feet (129.48') to a point;

Thence S89°57'35"W bounded southerly by last named land a distance of two hundred thirteen and 24/100 feet (213.24') to a point;

Thence S00°02'25"E bounded easterly by last named land a distance of fifteen and 57/100 feet (15.57') to a point;

Thence S44°57'35"W bounded southeasterly by last named land a distance of five and 64/100 feet (5.64') to a point;

Thence S00°02'25"E bounded easterly by last named land a distance of zero and 50/100 feet (0.50') to a point;

Thence N89°56'40"W along the center of a brick wall and bounded southerly by last named land a distance of eighty eight and 79/100 feet (88.79') to Sims Avenue and the point of beginning.

Parcel contains 6.58351 acres or 286,778 square feet more or less.

A.P. 27, Lot 292 - 345 Harris Ave.

That parcel of land situated in the City of Providence and State of Rhode Island bounded and described as follows:

Beginning at a drill hole set in the northerly line of Harris Avenue at the southeast corner of the herein described parcel, said point being 445.87' feet easterly from the intersection of Harris Avenue and Sims Avenue;

Thence S89°57'35"W along the northerly line of Harris Avenue a distance of one hundred twenty eight and 87/100 feet (128.87') to a drill hole set;

Thence N00°02'25"W bounded westerly by land now or formerly of FWD Realty Corp. a distance of one hundred twenty nine and 48/100 feet (129.48') to a railroad spike set;

Thence S89°57'35"W a distance of six and 17/100 feet (6.17') to a point;

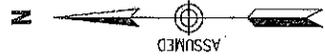
Thence N00°02'25"W a distance of ninety five and 52/100 feet (95.52') to a point;

Thence N 89°57'35"E a distance of one hundred thirty five and 04/100 feet (135.04') to a nail found;

Thence S00°02'25"E bounded easterly by land now or formerly of R.C.F. Realty Corp. a distance of two hundred twenty five and 00/100 feet (225.00') to the point of beginning.

Parcel contains 0.67918 acres or 29,585 square feet more or less.

ELUR - Exhibit 2A



KINSLEY AVENUE

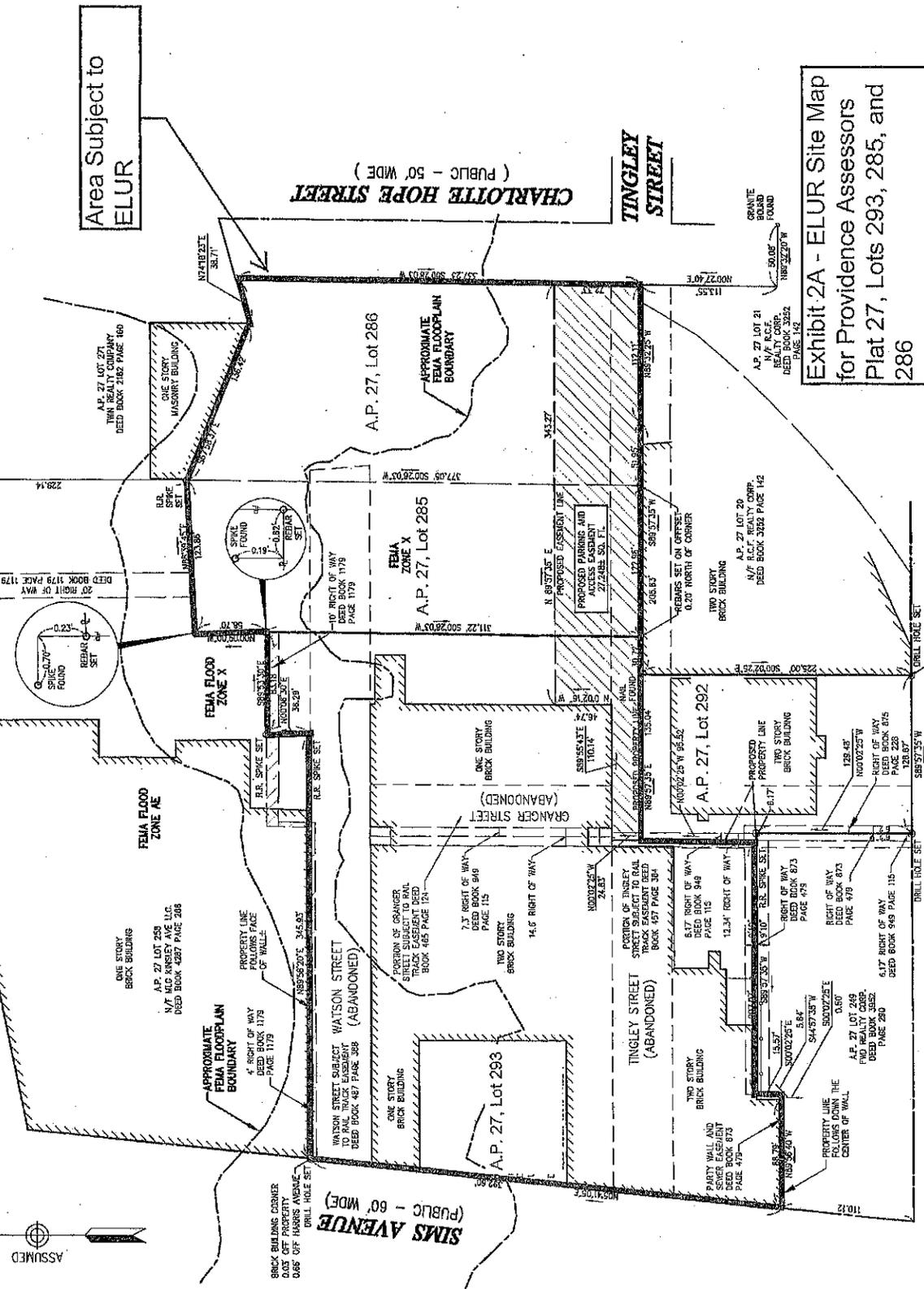
Area Subject to
 ELUR

CHARLOTTE HOPE STREET
 (PUBLIC - 50' WIDE)

TINGLEY STREET

Exhibit 2A - ELUR Site Map
 for Providence Assessors
 Plat 27, Lots 293, 285, and
 286

HARRIS AVENUE
 (PUBLIC - 60' WIDE)



SIMS AVENUE
 (PUBLIC - 60' WIDE)

BRICK BUILDING CORNER
 0.33' OFF PROPERTY
 0.03' OFF HARRIS AVENUE

CONC. BUILDING CORNER
 0.33' OFF PROPERTY
 0.03' OFF HARRIS AVENUE

AP. 27 LOT 27
 TWA REALTY COMPANY
 DEED BOOK 2182 PAGE 160

AP. 27, Lot 286

FEMA ZONE X
 A.P. 27, Lot 285

AP. 27 LOT 21
 N/F R.C.E.
 REALTY CORP.
 DEED BOOK 2182
 PAGE 142

AP. 27 LOT 20
 N/F R.C.E. REALTY COMP.
 DEED BOOK 2182 PAGE 142

AP. 27, Lot 292

AP. 27, Lot 293

ONE STORY
 BRICK BUILDING

AP. 27 LOT 258
 N/F MID KANSLEY AVE LLC
 DEED BOOK 4287 PAGE 288

APPROXIMATE
 FEMA FLOODPLAIN
 BOUNDARY

PROPERTY LINE
 FOLLOWS FACE
 OF WALLS

4' RIGHT OF WAY
 DEED BOOK 1179
 PAGE 1179

WATSON STREET
 (ABANDONED)

ONE STORY
 BRICK BUILDING

WATSON STREET SUBJECT
 DEED BOOK 487 PAGE 388

PROPORTION OF GRANGER
 STREET SUBJECT TO RAIL
 TRACK EASEMENT DEED
 BOOK 485 PAGE 124

1.5' RIGHT OF WAY
 DEED BOOK 916
 PAGE 115

TWO STORY
 BRICK BUILDING

14.6' RIGHT OF WAY

PORTION OF TINGLEY
 STREET SUBJECT TO RAIL
 TRACK EASEMENT DEED
 BOOK 457 PAGE 38

6.17' RIGHT OF WAY
 DEED BOOK 949
 PAGE 112

12.3' FRONT OF WAY

RIGHT OF WAY
 DEED BOOK 873
 PAGE 475

RIGHT OF WAY
 DEED BOOK 873
 PAGE 478

RIGHT OF WAY
 DEED BOOK 875
 PAGE 228

6.17' RIGHT OF WAY
 DEED BOOK 949 PAGE 112

DRILL HOLE SET

TWO STORY
 BRICK BUILDING

PROPERTY LINE
 FOLLOWS DOWN THE
 CENTER OF WALL

AP. 27 LOT 288
 DEED BOOK 3352
 PAGE 280

PROPERTY LINE
 FOLLOWS DOWN THE
 CENTER OF WALL

AP. 27 LOT 289
 DEED BOOK 3352
 PAGE 280

PROPERTY LINE
 FOLLOWS DOWN THE
 CENTER OF WALL

AP. 27 LOT 290
 DEED BOOK 3352
 PAGE 280

REBARS SET ON OFFICE
 0.20' NORTH OF CORNER

TWO STORY
 BRICK BUILDING

PROPOSED
 PARKING AND
 DRIVEWAY
 27,288, 30, 4, 1

REBARS SET ON OFFICE
 0.20' NORTH OF CORNER

TWO STORY
 BRICK BUILDING

REBARS SET ON OFFICE
 0.20' NORTH OF CORNER

TWO STORY
 BRICK BUILDING

REBARS SET ON OFFICE
 0.20' NORTH OF CORNER

TWO STORY
 BRICK BUILDING

REBARS SET ON OFFICE
 0.20' NORTH OF CORNER

TWO STORY
 BRICK BUILDING

REBARS SET ON OFFICE
 0.20' NORTH OF CORNER

TWO STORY
 BRICK BUILDING

REBARS SET ON OFFICE
 0.20' NORTH OF CORNER

ELUR - EXHIBIT B

SOILS MANAGEMENT PLAN

50 Sims Avenue Property
Providence, Rhode Island
A.P. 27, Lots 293, 285, and 286
(RIDEM Case #2006-074)

This *Soils Management Plan* has been prepared to establish procedures to be followed during construction/maintenance activities that require the need to manage soils excavated from the subsurface at the 50 Sims Avenue Property (Site). The plan serves to supplement, and will be initiated by, the RIDEM notification requirement established by the RIDEM-approved Environmental Land Usage Restriction (ELUR) for the property

In accordance with Section A iii of the ELUR, no soil at the property is to be disturbed in any manner without prior written permission of the RIDEM's Office of Waste Management, except for minor inspections, maintenance, and landscaping activities that do not disturb the contaminated soil. Such notification requirements do not apply during "emergency" situations as described in Section C of the ELUR. As part of the notification process, the Site owner shall provide a brief written description of the anticipated Site activity involving soil excavation. The notification should be submitted to the RIDEM no later than 60 days prior to the proposed initiation of the start of Site activities. The description shall include an estimate of the volume of soil to be excavated, a list of the known and anticipated contaminants of concern, a Site figure clearly identifying the proposed areas to be excavated/disturbed, the duration of the project, and the proposed disposal location of the soil.

Following written Notification, the RIDEM will determine the post closure reporting requirements. Significant disturbances of regulated soil may require submission of a *Closure Report* for Department review and approval documenting that the activities were performed in accordance with this *Soils Management Plan* and the RIDEM-approved ELUR. Minor disturbances of regulated soil may be documented through the annual certification submitted in accordance with Section H (Inspection & Non-Compliance) of the ELUR. The RIDEM will also make a determination regarding the necessity of performing Public Notice to abutting property owners/tenants concerning the proposed activities. Work associated with the Notification will not commence until written RIDEM approval has been issued. Once RIDEM approval has been issued, the RIDEM will be notified a minimum of two (2) days prior to the start of activities at the Site. Should any significant alterations to the RIDEM-approved plan be necessary, a written description of the proposed deviation will be submitted to the RIDEM for review and approval prior to initiating such changes.

As described, emergency work/utility repairs which require disturbing Site soils can be performed without prior written notification to RIDEM. Such work is subject to the requirements are outlined in Section C of the ELUR. In addition to the RIDEM notification requirements and environmental considerations presented in that section, it is important that the contractor performing the emergency work/utility repairs be made aware of the Site conditions and be provided with a copy of this *Soil Management Plan*.

CONTAMINANTS OF CONCERN

Direct contact with surficial soils and consumption of groundwater have been identified as a long-term exposure pathway of concern at the Site. Near surface soils at the Site were found to contain certain constituents (*i.e.*, arsenic, lead, mercury, selenium and polycyclic aromatic hydrocarbons (PAHs)) at concentrations that exceed the Method 1 Residential and Industrial/Commercial Direct Exposure Criteria. Selenium was detected at concentrations above the Upper Concentration Limit (UCL) in soil samples in a specific portion of the Site, but has been effectively removed as part of response actions completed at the Site.

SOIL MANAGEMENT GUIDELINES

The following soil management guidelines were developed for activities involving soil excavation at the Site. The guidelines apply to all construction and maintenance activities; refer to the "emergency" provision of the Environmental Land Usage Restriction. The procedures will be implemented to govern soil stockpiling, management, and disposal procedures. The stockpiling and disposal procedures detailed in this plan apply only to excess soil which cannot be used as backfill in the original excavation from which it came. Soil generated from an excavation conducted at the Site may be placed back into its original excavation for backfill upon completion of the excavation. However, so as to maintain known exposure scenarios, every attempt shall be made to backfill the excavation so that the corresponding depth and location of the backfilled soil resembles the depth and location at which the soil originally existed.

- Provide 30 days written notice to RIDEM before any mechanical excavation, or within three days of excavation in response to an emergency as provided in the ELUR.
- As part of the RIDEM notification, the Site owner will provide a brief written description of the anticipated Site activity involving soil excavation. The description will include an estimate of the volume of soil to be excavated and the duration of the construction project.
- Prior to the initiation of soil excavation, the selected contractor or any other personnel performing subsurface work at the Site will contact DIGSAFE® and appropriate utility companies to identify and mark the location of below grade utilities.
- Excavated soils will be staged and temporarily stored in a designated area of the property for no more than 90 days. Within reason, the storage location will be selected to limit the unauthorized access to the materials (*i.e.*, away from public roadways/walkways).
- Depending on the volume of material involved in the project, soils will be either stockpiled on polyethylene sheeting, or stored in roll-off type containers. In either case, the material in storage will be covered with secured polyethylene sheeting at the end of each workday. Stockpiled materials will be maintained with appropriate controls to limit the loss of the cover and protect against stormwater erosion. Soil stockpiles shall be inspected daily. Should tears or punctures be observed in either the polyethylene sheeting covering or underlying the piles, repairs will be made immediately.

- During earthwork activities, dust suppression techniques must be initiated and maintained during periods when windblown dusts are generated. All reasonable precautions must be taken to prevent the excessive generation of dust during soil excavation, stockpiling, loading, and other soil handling activities. If excessive dust generation occurs and cannot be reasonably controlled, dust masks should be required for onsite workers.
- In the event that unexpected observations or situations involving hazardous materials, hazardous wastes or similar conditions of environmental concern arise during Site work, such activities will immediately stop. Workers will not attempt to handle the situation themselves, but will contact an environmental professional for further evaluation and direction.
- Soils excavated from the Site may not be re-used on off-Site properties. Excavated fill material shall not be re-used as fill on commercial properties unless it meets the Residential Direct Exposure Criteria for all constituents listed in Table 1 of the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases. Soil must be sampled, by an environmental professional, at a frequency of one sample per 500 tons for all constituents. In the event that the soil does not meet these criteria, the material must be properly managed and disposed of off-Site at a permitted facility
- If soils are to be transported off-Site for disposal/reuse/recycling, a qualified environmental professional will collect samples of the excavated soils (either during excavation or from stockpiles) for laboratory testing. The testing program will be adequate to support the data requirements of the anticipated disposal facility, but should consider the following testing program

Analyte/Parameter	Test Method
Petroleum hydrocarbons	EPA Method 8100M
Volatile organic compounds	EPA Method 8260
Semi-volatile organic compounds	EPA Method 8270
Polychlorinated Biphenyls	EPA Method 8081
Total RCRA Metals	EPA Method 6010 & 7471A
Flashpoint	EPA Method 1010M
Corrosivity (pH)	EPA Method 9045C
Reactivity	EPA Methods SW-846 7.3.3.2/9014 and SW-846 7.3.4.2/376.2

- Copies of the material shipping records associated with the disposal of the materials will be maintained by the Site owner and will be summarized in a closure report and in the annual property inspection reports to be completed by a qualified professional and submitted to the RIDEM.
- Any clean fill material brought onsite is required to meet the Method 1 Residential Direct Exposure Criteria or be designated by an Environmental Professional as Non-Jurisdictional under the Remediation Regulations. Compliance samples of clean fill and loam will be sampled for VOCs, Total Metals (RCRA 13), SVOCs and TPH at a frequency of one sample per 1,000 cubic-yards. All soil that is to be utilized onsite must meet the Residential Direct Exposure Criteria or be certified to be non-jurisdictional. The *Annual*

Inspection Report for the site, or *Closure Report* if applicable, should include the analytical sampling results from the fill demonstrating compliance. Any fill determined to be non-jurisdictional will also require the submission of a written certification by an Environmental Professional designating that the fill is not jurisdictional.

HEALTH AND SAFETY GUIDELINES

The basic health and safety procedures outlined below should be implemented while performing excavation work at the Site. Recognize that the procedures are intended as a general guideline only. Contractors and others involved in subsurface excavation work at the Site are responsible for the preparation of their own health and safety procedures.

Based on the type of chemical constituents present at the Site, the potential routes of exposure to onsite excavation or utility repair workers include dermal contact (absorption) or accidental ingestion of impacted soil, and the possible introduction of contaminants through broken skin. As contaminants released at the Site are not volatile in nature, inhalation hazards are not anticipated, provided dust control procedures are followed. Utilization of the appropriate personal protective equipment and the general safety guidelines provided below will help minimize the potential for worker exposure to petroleum-impacted media while performing work within the ELUR area.

Personal Protective Equipment (PPE)

In general, the level of protection which will be used by workers will be determined by the task which the person is performing; however, at a minimum, Level D PPE will be worn at all times while performing excavation activities within the ELUR area. Level D PPE will, at a minimum, consist of the following PPE.

- Steel-toe work boots with over-boots as needed;
- Hard hats;
- Rubber or leather gloves; and
- Work coveralls.

Site Operating Procedures/Safety Guidelines

Regardless of the level of PPE necessary to complete work, the following general health and safety guidelines should be followed during the performance of any excavation activities conducted.

- The location of all utilities in the vicinity of the excavation will be established prior to beginning work.
- During Site work, precautions should be taken to restrict access to the work area to only personnel involved in the work activities. Under no circumstances should the general public be allowed access to the area.

- Practice contamination avoidance: never sit or kneel in an excavation, never lay equipment on the ground; avoid obvious sources of contamination such as puddles; and avoid unnecessary contact with objects in an excavation;
- Be alert to any unusual changes in your physical condition, never ignore warning signs. Notify the responsible employee as to suspected exposures;
- All equipment used in an excavation shall be properly cleaned and maintained in good working order. Equipment shall be inspected for signs of defect and/or contamination before use;
- Eating, drinking, chewing gum, and smoking shall be prohibited in active excavation areas;
- During working hours, workers who stop to drink or eat should leave the active work area, remove PPE, and wash hands thoroughly with soap and water prior to eating or drinking;
- The discovery of any condition that would suggest the existence of a situation more hazardous than anticipated shall result in the evacuation of Site personnel from the excavation and the re-evaluation of the hazard and the level of protection.
- At the completion of work, workers should wash their hands with soap and water before leaving the Site. All workers safety boots are recommended to be brushed with a stiff bristle brush or similar instrument (not by hand) to remove residual soil. Disposable personal protective equipment (PPE) should be disposed of according to applicable regulations.

In Case of Serious Exposure of Injury

In the event of serious chemical exposure or worker injury, the responsible employee will immediately be alerted. This person will follow the steps indicated below:

1. Summon appropriate emergency response agency by using the emergency phone numbers provided below. Convey the following information:
 - a. Nature of emergency,
 - b. Location of victim,
 - c. Specific information, about exposure or accident (gases, chemical, asphyxiation, etc.),
 - d. Length of exposure, and
 - e. Hazards which may be involved in rescue or treatment;

2. If taken to a hospital, notify the hospital of the background of the problem
 - a. Potential for hospital contamination,
 - b. Any contaminated items and the nature of the contamination, and
 - c. Estimated arrival time.

Emergency Phone Numbers

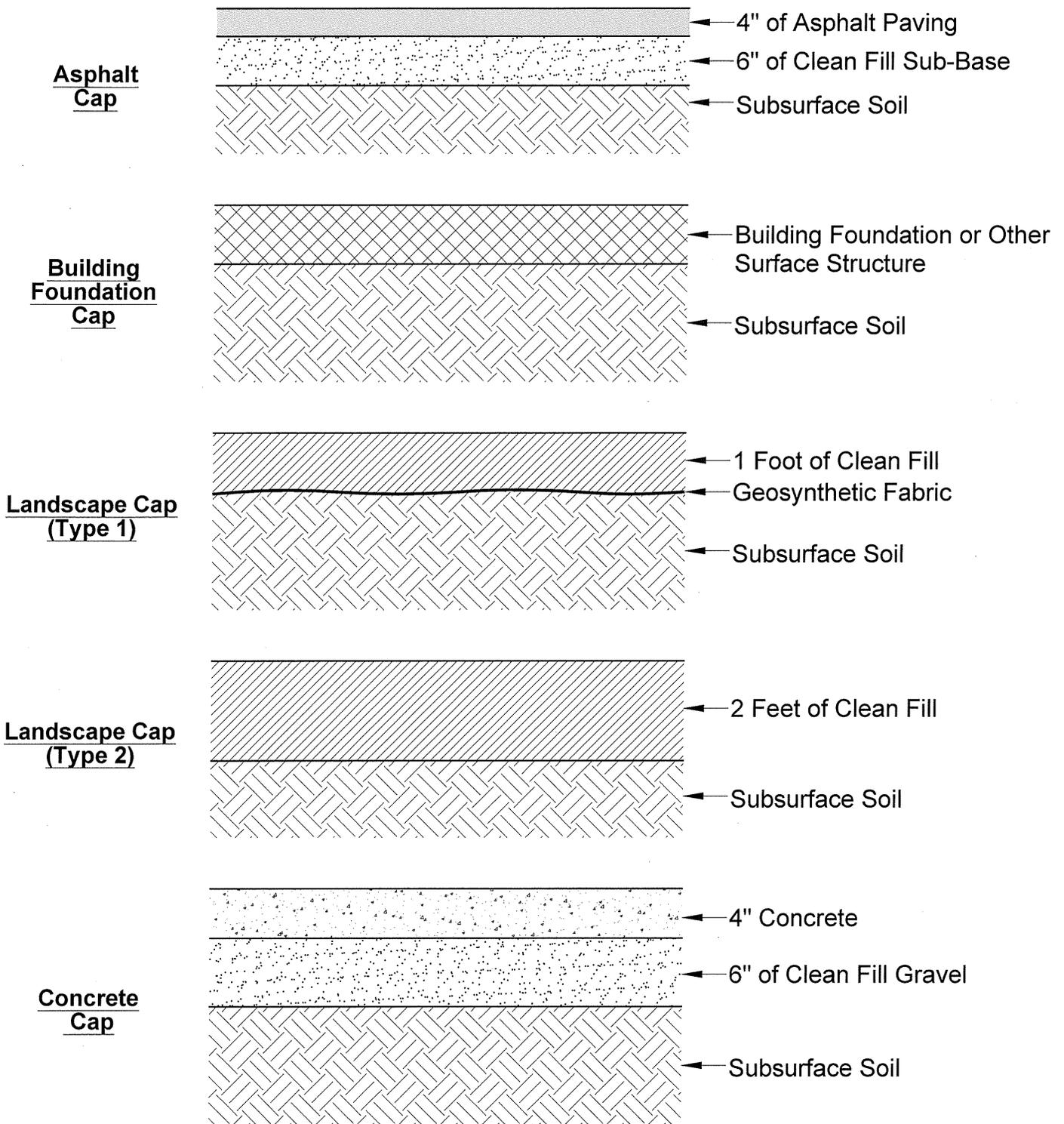
Emergency telephone numbers and the directions to the nearest hospital are included below [Note This information is subject to change and should be confirmed.]

Response Agency	Phone Number
Ambulance	911
Police	911
Fire	911
RIDEM/Office of Compliance & Inspection/Emergency response Program	(401) 222-1360 or (401) 222-3070 (non-business hours)
USEPA/Hazardous Materials Spills	(800) 424-8802
Poison Control Center	(800) 562-8236
DIGSAFE® (Utility Clearance)	1-888-DIGSAFE
Hospital	
Rhode Island Hospital	(401) 444-4000
Route to Hospital	
<ol style="list-style-type: none"> 1. Start out going NORTH on SIMS AVE toward KINSLEY AVE. 2. Turn RIGHT onto KINSLEY AVE. 3. Turn SLIGHT RIGHT onto DEAN ST 4. Merge onto US-6 E/RI-10 N/HUNTINGTON EXPY 5. Take the exit on the LEFT 6. Merge onto I-95 S toward I-195. 7. Take the EDDY ST exit, EXIT 19 8. Turn RIGHT onto EDDY ST 9. Arrive at RI Hospital 	

RECEIVED:

Providence
 Received for Record
 Aug 11, 2017 at 10:25A
 Document Num: 00178724
 John A Murphy
 Recorder of Deeds

**Attachment E: Engineered Control
Sections and Product Specifications**



Engineered Controls Details
 Providence Redevelopment Agency
 Assessor's Plat 27, Lots 293, 285, & 286
 50 Sims Ave., 460 Kinsley Ave., and 23 Charlotte Hope St.
 Providence, Rhode Island
 RIDEM Case No. 2006-074





Mirafi[®] 140N

Mirafi[®] 140N is a needlepunched nonwoven geotextile composed of polypropylene fibers, which are formed into a stable network such that the fibers retain their relative position. Mirafi[®] 140N is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids. Mirafi[®] 140N meets Aashto M288-06 Class 3 for elongation > 50%.

Mechanical Properties	Test Method	Unit	Minimum Average Roll Value	
			MD	CD
Grab Tensile Strength	ASTM D4632	lbs (N)	120 (534)	120 (534)
Grab Tensile Elongation	ASTM D4632	%	50	50
Trapezoid Tear Strength	ASTM D4533	lbs (N)	50 (223)	50 (223)
CBR Puncture Strength	ASTM D6241	lbs (N)	310 (1380)	
Apparent Opening Size (AOS) ¹	ASTM D4751	U.S. Sieve (mm)	70 (0.212)	
Permittivity	ASTM D4491	sec ⁻¹	1.7	
Flow Rate	ASTM D4491	gal/min/ft ² (l/min/m ²)	135 (5500)	
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	70	

¹ ASTM D4751: AOS is a Maximum Opening Diameter Value

Physical Properties	Unit	Typical Value	
Roll Dimensions (width x length)	ft (m)	12.5 x 360 (3.8 x 110)	15 x 360 (4.5 x 110)
Roll Area	yd ² (m ²)	500 (418)	600 (502)
Estimated Roll Weight	lb (kg)	164 (74)	197 (89)

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Appendix B – Site Electrical and Site Lighting Specifications to be Issued as an Addendum

APPENDIX E

CERTIFICATION REGARDING LOBBYING LOWER TIER COVERED TRANSACTIONS

Applicants should review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, "New Restrictions on Lobbying."

LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

NAME OF APPLICANT

AWARD NUMBER AND/OR PROJECT NAME

PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

SIGNATURE

DATE

APPENDIX F



**BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND**

**MINORITY AND WOMEN'S BUSINESS ENTERPRISE PROGRAM
BIDDER INFORMATION AND FORMS**

The City of Providence encourages Minority and Women owned businesses to participate in bids to meet the City's procurement needs. Pursuant to the City of Providence Code of Ordinances, Chapter 21, Article II, Sec. 21-52 (Minority and Women's Business Enterprise) and Rhode Island General Laws (as amended), Chapter 31-14, et seq. (Minority Business Enterprise), Minority Business Enterprise (MBE) and Women's Business Enterprise (WBE) participation goals apply to contracts.

The goal for Minority Business Enterprise (MBE) participation is **10%** of the total bid value. The goal for Women's Business Enterprise (WBE) participation is **10%** of the total bid value. The goal for combined MBE/WBE participation is **20%** of the total bid value.

Bid Requirements:

Bidders that will hire subcontractors must include a commitment to utilize MBEs and WBEs at a percentage that equals or exceeds the contract goals stated above. The City of Providence would like to be able to identify those Bidders, as well as Bidders that are themselves certified as an MBE/WBE. Minority or women-owned Bidders and Subcontractors are encouraged to seek certification from the State of Rhode Island Minority Business Enterprise Compliance Office at: <http://www.mbe.ri.gov/>

Based on the category of Bidder, specific forms from this document must be included as part of the BID package, as indicated in the Bid Package Checklist on the first page of the Request for Proposals packet that the Bidder is responding to. To comply with the MBE/WBE guidelines, please:

1. Review the Bidder Category Worksheet (page M/WBE-2) and identify the category that describes your business.
2. Review the Form Matrix (page M/WBE-3) to see the forms required for your category
3. Print the required forms (found in this packet) or download an electronic, editable version from: <http://www.providenceri.gov/purchasing/minority-women-owned-business-mbewbe-procurement-program/>
4. Complete the forms and include them with the other required documents listed in the Bid Package Checklist on the first page of the Request for Proposals packet.

For more information or for assistance with these forms or with M/WBE certification, contact:

- **Grace Diaz the MBE/WBE Outreach Director for the City of Providence**
- **(401) 680-5766**
- **gdiaz@providenceri.gov**
 - Please use subject line **"MBE WBE Forms"**



**BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND**

BIDDER CATEGORY WORKSHEET

IF THE BIDDING FIRM WILL SUBCONTRACT ANY PORTION OF THE GOOD(S) AND/OR SERVICE(S), SEE THE SECOND BLOCK BELOW.

A Bidder who is NOT subcontracting falls into one of the following four categories:

(1A) Solo M/WBE: An individual or sole-proprietor registered with the State of Rhode Island as an MBE or WBE, which will deliver all goods and services outlined in the bid being submitted.

(1B) Solo Non-M/WBE: An individual or sole-proprietor *not* registered with the State of Rhode Island as an MBE or WBE, which will deliver all goods and services outlined in the bid being submitted.

(2A) Firm M/WBE: A firm registered with the State of Rhode Island as an MBE or WBE, employing multiple staff. All goods and services outlined in the bid will be delivered by members of said firm.

(2B) Firm Non-M/WBE: A firm *not* registered with the State of Rhode Island as an MBE or WBE, employing multiple staff. All goods and services outlined in the bid will be delivered by members of said firm.

A Bidder who IS Subcontracting falls into one of the following four categories:

(3A) M/WBE-Prime, M/WBE-Sub A firm, individual or sole-proprietor registered with the State of Rhode Island as an MBE or WBE, who proposes to hire one or more subcontractors registered with the State of Rhode Island as an MBE or WBE to deliver a portion of the goods and services outlined in the proposal.

(3B) M/WBE-Prime, Non-M/WBE-Sub: A firm, individual or sole-proprietor registered with the State of Rhode Island as an MBE or WBE, who proposes to hire one or more subcontractors to deliver a portion of the goods and services outlined in the proposal, *none of which* are registered with the State of Rhode Island as an MBE or WBE.

(3C) Non-M/WBE-Prime, M/WBE-Sub: A firm, individual or sole-proprietor *not* registered with the State of Rhode Island as an MBE or WBE, who proposes to hire one or more subcontractors registered with the State of Rhode Island as an MBE or WBE to deliver a portion of the goods and services outlined in the proposal.

(3D) Non-M/WBE-Prime, Non-M/WBE-Sub: A firm, individual or sole-proprietor *not* registered with the State of Rhode Island as an MBE or WBE, who proposes to hire one or more subcontractors to deliver a portion of the goods and services outlined in the proposal, *none of which* are registered with the State of Rhode Island as an MBE or WBE.



**BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND**

FORM MATRIX

After determining the Bidder category, see the corresponding column below. A in the matrix below indicates the form is always required and a '?' indicates that it is dependent upon the ability of the firm to meet MBE/WBE goals and how much outreach was conducted.

FORM	<u>CATEGORY</u>							
	<u>1A</u>	<u>1B</u>	<u>2A</u>	<u>2B</u>	<u>3A</u>	<u>3B</u>	<u>3C</u>	<u>3D</u>
Form A: M/WBE Participation Affidavit					<input type="checkbox"/>		<input type="checkbox"/>	
Form B: M/WBE Participation Disclosure					<input type="checkbox"/>		<input type="checkbox"/>	
Form C: Contractor Intent (one per sub)					<input type="checkbox"/>		<input type="checkbox"/>	
Form D1: Contractor Waiver					?	?	?	<input type="checkbox"/>
Form D2: Independent Waiver	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Form E: MBE/WBE Outreach					?	?	?	?

Contractors falling into Category 3A, 3B or 3C who fully meet the MBE/WBE goals are not required to fill out the Contractor Waiver (Form D1) or Outreach (Form E). Depending upon the effort and results of the Bidder's outreach, the Outreach form may or may not be necessary for Category 3 Bidders.

Waiver Requests:

If a Bidder is unable to comply with a contract goal, a waiver request signed by the MBE/WBE coordinator must be submitted with the bid. The waiver request must be made on the MBE/WBE Participation Waiver Request Form (Form D1 or D2). If Bidder is Subcontracting a portion of the contract (Category 3) and will not meet MBE/WBE goals, no waiver will be granted unless the waiver request includes documentation that demonstrates that the Bidder has made good faith efforts to comply (which may include Form E, for Outreach).

Contract Requirements:

During the term of the contract, any unjustified failure to comply with the MBE/WBE participation requirements is a material breach of contract. Contractors in category 3A and 3C must submit the Subcontractor Utilization Form (Form F) quarterly (not with the bid package), or for contracts with a duration of less than 3 months, it must be submitted along with with the contractor's request for final payment. The form will include all subcontractors utilized on the contract, both MBE/WBE and non- MBE/WBE, the total amount paid to each subcontractor, and the owner's race/ethnicity and sex.

For category 3A and 3C, please thoroughly review the Participation Affidavit (Form A) for information regarding documentation submission requirements throughout the duration of the contract.



BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND

VERIFYING MBE/WBE CERTIFICATION

Each Bidder is responsible for verifying that each MBE/WBE named in a proposal and included in a contract is certified by the Rhode Island Minority Business Enterprise Compliance office. The current MBE/WBE directory is available at the State of RI MBE Office, One Capitol Hill, 2nd Floor, Providence, RI, or online at www.mbe.ri.gov (click "Directory Search" then search by "Product or Service" or "Company Name"). You can also call (401) 574-8670 to verify certification, expiration dates and services that the MBE/WBE is certified to provide. *NOTE: Companies identified as Portuguese are not included in the City of Providence MBE/WBE Program.*

Commercially Useful Function: The Bidder may count toward the contract goals only expenditures to a MBE/WBE that performs a commercially useful function in the execution of the contract. Commercially useful function means the performance of real and distinct work for which the business enterprise has the skill, expertise, and responsibility to perform, manage and supervise.

Subcontracting by MBE/WBE: A Bidder **MAY NOT** count toward its contract goal any agreement with a certified MBE or WBE subcontractor who intends to subcontract more than 10% of the dollar amount of the services to be performed under its agreement with the Bidder. This restriction does not apply to an MBE/WBE Contract for the purchase of materials, equipment, or supplies incidental to the performance of services under its agreement with the Bidder.

Manufacturers: The entire expenditure to a certified MBE/WBE manufacturer may be counted.

Non-Manufacturer Suppliers: A Bidder may count 100% of its expenditure to a certified MBE or WBE supplier. (However, only 10% of each contract goal may be attained by expenditure to MBEs or WBEs that are non-manufacturing suppliers.)

Insurance Companies and Travel Agents: A Bidder may count toward the contract goals only 10% of its expenditure to a MBE or WBE insurance company or travel agent.

Financial Institutions: Only fees charged/earned by MBE/WBE Financial Institutions may be counted.



**BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND**

Form A: MBE/WBE Participation Affidavit

The undersigned authorized representative of contractor does hereby make the following Affidavit:

Contractor acknowledges the MBE goal of 10% and the WBE goal of 10% for contract

(title)_____with the City of Providence.

My firm will make its best efforts to achieve the MBE and WBE participation goals for this contract. I understand that, if awarded the contract, my company must submit to the Minority and Women's Business Coordinator at the City of Providence MBE/WBE office, copies of all executed agreements with the Subcontracted Firm(s) being utilized to achieve the participation goals and other requirements of the RI General Laws. **I understand that these documents must be submitted prior to the issuance of a notice to proceed.**

I understand that, if awarded the contract, my firm must submit to the MBE/WBE Office canceled checks and any other documentation and reports required by the MBE and WBE Office on a quarterly basis verifying payments to the Subcontracted Firm(s) utilized on the contract.

I understand that if I am awarded this contract and I find that I am unable to utilize the Subcontracted Firm(s) identified in my statements of Intent, I must substitute other certified MBE and WBE firms to meet the participation goals. **I understand that I may not make a substitution until I have obtained the written approval of the MBE/WBE Office.**

I understand that, if awarded this contract, authorized representatives of the City of Providence may examine, from time to time, the books records and files of my firm to the extent that such material is relevant to a determination of whether my firm is complying with the MBE and WBE participation requirements of this contract.

I do solemnly declare and affirm under the penalty of perjury that the contents of the foregoing affidavit are true and correct to the best of my knowledge, information and belief.

Contractor Company Name

Signature

Address

Print Name and Title

For more information on this program please contact Grace Diaz the MBE/WBE Outreach Director for the City of Providence, by phone at (401) 680-5766 or by email at gdiaz@providenceri.gov. (Please use subject line "MBE WBE Forms")



**BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND**

Form B: MBE/WBE Participation Disclosure Form

Use this form to list Minority and Women Business Enterprises that you will use to meet the Participation Goals. Please consider that:

- A Subcontractor may be used to achieve an MBE/WBE goal equal to the percentage of the value of the full contract that the Subcontractor is hired for.
- A Subcontractor certified as both an MBE and WBE may be used to meet both goals, however the value of the Subcontractor contract must be allocated towards each goal so that the total value allocated does not exceed the total value of the contract the Subcontractor is hired for.

Prime Contractor's Name: _____

Prime Contractor's Address: _____

Prime Contractor's Phone Number(s): _____

Contract Title: _____

Total Dollar Amount of Contract: \$ _____

Bidder proposes to achieve a goal of: MBE: _____% WBE: _____%

Please list Subcontractors that should be considered in achieving MBE/WBE goals below. Include the total dollar value that you propose to share with each Subcontractor and the percentage of the contract total that dollar amount represents.

Subcontractor Name	MBE/WBE Subcontractor Share		
	\$ Value	% of Total Value	
		for MBE	For WBE
TOTAL:	\$	%	%

Form Prepared by:

Name & Title

Phone

Date



BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND

Form C: MBE/WBE and Prime Contractor's Statement of Intent

*Complete a separate Form C for each MBE/WBE Subcontractor identified in the table on Form B.

Contract Name: _____

Name of Prime Contractor: _____

Name of MBE/WBE Subcontractor: _____

MBE/WBE Subcontractor Certification # (MBCN#): _____ Exp. Date: _____

Type of Certification (please choose all that apply): MBE WBE

Work / Service to be performed or Materials / Supplies to be furnished by MBE/WBE: _____

Project Total Value: \$ _____ Amount going to Subcontractor: \$ _____

Percentage of total contract going towards the **MBE/WBE** subcontractor: _____%

IF the subcontractor is certified as BOTH an MBE and WBE, you may allocate the qualified percentage among the two categories as you choose by specifying the division below. The two percentages below must sum to the percentage entered immediately above. Refer to page M/WBE-14 for an example of dual certification.

MBE Allocation: _____% **WBE Allocation:** _____%

The undersigned prime contractor and subcontractor agree to enter into a contract for the work / service indicated above for the dollar amount or percentage indicated, subject to the prime contractor's execution of a contract with the City of Providence for the above referenced contract name/number. The undersigned subcontractor is currently certified as an MBE or WBE through the State of Rhode Island Minority Business Enterprise Program.

Signature of Prime Contractor (Required) Printed Name Date

By signing below, the representative of the certified MBE/WBE subcontractor additionally affirms that no more than 10% of the dollar amount of the services to be performed under this agreement with the Bidder will be subcontracted to a 3rd party subcontractor. This restriction does not apply to an MBE's or WBE's Contracts for the purchase of materials, equipment, or supplies incidental to the performance of services under its agreement with the Bidder.

Signature of MBE or WBE (Required) Printed Name Date



**BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND**

Form D1: MBE/WBE Participation Contractor Waiver Request Form

Name of Bidder: _____

Contract Name/Number: _____

Bid Due Date: _____

Goals on this contract: _____ % MBE _____ % WBE

I have achieved _____ % MBE _____ % WBE

I am requesting a waiver of _____ % MBE _____ % WBE

Is the **BIDDER** certified by the State of Rhode Island Minority Business Enterprise Program ___ Yes ___ No

If Yes, please check the type(s) of certification and enter the Certification number immediately below:

Type of Firm: MBE WBE

MBE/WBE Certification Number (MBCN#): _____ Expiration Date: _____

Did the Bidder attempt to or does the Bidder intend to subcontract any portion of the proposed work/service to a MBE/WBE? Yes ___ No

If yes, how many firms were contacted? ___ **Complete the Outreach Contact form (Form E) for each firm not listed on Participation Disclosure form (Form B).**

What efforts have been made to secure sufficient MBE/WBE participation to meet the stated goals and/or why is your company unable to? _____

I acknowledge the City of Providence's goals of supporting MBE/WBE certified businesses.

Signature of Bidder Printed Name Date

Submit this form to the City of Providence MBE/WBE Office for signature and approval by either the MBE/WBE Compliance Officer or the MBE/WBE Coordinator. All requests must be made at least four (4) days prior to the bid opening date.

Signature of MBE/WBE Outreach Director* Printed Name Date

***For more information on this program please contact Grace Diaz the MBE/WBE Outreach Director for the City of Providence, by phone at (401) 680-5766 or by email at gdiaz@providenceri.gov. (Please use subject line "MBE WBE Forms")**

****This form will NOT be considered complete without the signature of the MBE/WBE Outreach Director.**



**BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND**

Form D2: MBE/WBE Participation Independent Waiver Request Form

Does the Bidder intend to subcontract any portion of the proposed work/service to a MBE/WBE?

___ Yes ___ No

This form is for Bidders in Category 1 and 2 only, so if you answered Yes to the above question, please review the Bidder Category Worksheet (page 3) and Form Matrix (page 1) to determine the correct forms to use.

Name of Bidder: _____

Contract Name/Number: _____ Bid Due Date: _____

Goals on this contract: _____ % MBE _____ % WBE

I have achieved _____ % MBE _____ % WBE

I am requesting a waiver of _____ % MBE _____ % WBE

Is the **BIDDER** certified by the State of Rhode Island Minority Business Enterprise Program _____ Yes ___ No
If Yes, please check the type(s) of certification and enter the Certification number immediately below:

Type of Firm: MBE WBE

MBE/WBE Certification Number (MBCN#): _____ Expiration Date: _____

I acknowledge the City of Providence’s goals of supporting MBE/WBE certified businesses. If an opportunity is identified to subcontract any task associated with the fulfillment of this contract, a good faith effort will be made to select MBE/WBE certified businesses as partners

Signature of Bidder Printed Name Date

Submit this form to the City of Providence MBE/WBE Office for signature and approval by either the MBE/WBE Compliance Officer or the MBE/WBE Coordinator. All requests must be made at least four (4) days prior to the bid opening date.

Signature of MBE/WBE Outreach Director* Printed Name Date

***For more information on this program please contact Grace Diaz the MBE/WBE Outreach Director for the City of Providence, by phone at (401) 680-5766 or by email at gdiaz@providenceri.gov. (Please use subject line “MBE WBE Forms”)**

****This form will NOT be considered complete without the signature of the MBE/WBE Outreach Director.**



**BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND**

Form E: MBE/WBE Outreach Contact Form

This form must be filled out by Bidders who propose to subcontract a portion of this contract, *but will not fully meet the MBE/WBE goals*. **Please complete this form for each unsuccessfully solicited MBE/WBE subcontractor.**

Prime Contractor: _____

POTENTIAL SUBCONTRACTOR CONTACTED

Name: _____

Address: _____

Telephone No.: _____ Date of Initial Contact: _____

Type of Firm: MBE WBE

How was contact made? (Check appropriate answer) By telephone _____ In person _____

Work/service offered to Subcontractor: _____

Result of contact with potential MBE/WBE Firm (check appropriate answer):

___ Firm declined job

___ Firm offered to do job at a price of \$____, which was determined by our company to be too high

___ Firm offered to do job at a price of \$____, which was satisfactory, but the firm was judged by our company to be unqualified for the job for the following reasons: _____

___ Other: _____

Subcontractor Firm's officer who can verify above information as to the Firm's response:

Name: _____

Title: _____

Signature: _____

The above signed officer of the Bidder affirms that the above information is accurate and complete.

CERTIFICATE OF CORPORATE AUTHORITY
CONSTRUCTION SERVICES FOR
CHARLOTTE HOPE PLAZA PROJECT

P R O V I D E N C E , R H O D E I S L A N D

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____ of the Corporation named as Contractor in the within submission; that, _____ who signed the submission on behalf of the Contractor was then _____ of said corporation; that I know his/her signature, and his/her signature thereto is genuine; and that said submission was duly signed, sealed, and attested to for and on behalf of said Corporation by its own authority.

_____(Corporate Seal)

Title

**NON-COLLUSION AFFIDAVIT of PRIME BIDDER
CONSTRUCTION SERVICES FOR
CHARLOTTE HOPE PLAZA PROJECT**

P R O V I D E N C E , R H O D E I S L A N D

State of _____)
County of _____) ss

_____, being first duly sworn, deposes and says that:

- (1) He is the _____ of _____, the Bidder that has submitted the attached Bid:
- (2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid:
- (3) Such Bid is genuine and is not a collusive or sham Bid;
- (4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement, any advantage against the Providence Redevelopment Agency or any person interested in the proposed Contract; and
- (5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

Title

Subscribed and sworn to before me this

_____ day of _____, 20_____

Title

My Commission expires _____

**CERTIFICATION OF NON-SEGREGATED FACILITIES
CONSTRUCTION SERVICES FOR
CHARLOTTE HOPE PLAZA PROJECT**

P R O V I D E N C E , R H O D E I S L A N D

CERTIFICATION OF NON-SEGREGATED FACILITIES

The Bidder certifies that he/she does not maintain or provide for his/her employees any segregated facilities at any of his establishments, and that he/she does not permit his/her employees to perform their services at any location, under his/her control, where segregated facilities are maintained. The Bidder agrees that a breach of this certification will be a violation of the Equal Opportunity Clause in any contract resulting from acceptance of this Bid. As used in this certification, the term "segregated facilities" means any waiting rooms, work rooms, restrooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. The Bidder agrees that (except where he/she has obtained identical certification from proposed subcontractors for specific time periods) he/she will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000.00 which are not exempt from provisions of the Equal Opportunity Clause, and that he/she will retain such certifications in his/her files.

Note: The penalty for making false statements in offers is prescribed in 18 U.S.C. & 1001.

DATE _____, 20____

Official Address:

Name of Bidder (Firm):

By _____
(Signature)

Title _____

**BIDDER'S CERTIFICATION for
EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION SERVICES FOR
CHARLOTTE HOPE PLAZA PROJECT
PROVIDENCE, RHODE ISLAND**

In compliance with Executive Order 11246 Equal Opportunity (GC II, Section 210, or latest publication) the Bidder hereby certifies he shall comply with Bid Conditions, Affirmative Action Requirements, Equal Employment Opportunity, as provided in the attachment Shown on pages GC II - 47a to GC II - 47f, or latest publication.

Full name and address of individual or concern submitting this Bid:

Signed _____ Title

_____ Date

Notice: Bid should be signed in ink by a person having proper legal authority, and the person's title should be given, such as "Owner" in the case of an individual, "Partner" in the case of a general partnership, "President", Treasurer, or other authorized officer in the case of a corporation.

SPECIAL REQUIREMENT for ALL OUT-OF-
STATE CONTRACTORS and FIRMS
CONSTRUCTION SERVICES FOR
CHARLOTTE HOPE PLAZA PROJECT
PROVIDENCE, RHODE ISLAND

It is the understanding of any and all out-of-state firms and companies must be registered to do business in the State of Rhode Island with the Secretary of State's Office. Any false statements made in this regard will cause this Contract to become null and void at the option of the Agency, therefore, in accordance with this requirement the following statement is made:

I (we) being duly sworn officers of said company or firm, hereby declare and affirm that this company or firm is registered with the Rhode Island Secretary of State's Office to do business in Rhode Island.

Company or Firm

Attest:

By _____

Title _____

Note: If proposal is being made by an in-state contractor or firm, this form may be left blank.

**CERTIFICATION with Regard to PERFORMANCE
of PREVIOUS CONTRACTS and SUBCONTRACTS
CONSTRUCTION SERVICES FOR
CHARLOTTE HOPE PLAZA PROJECT
P R O V I D E N C E , R H O D E I S L A N D**

The Bidder _____, proposed Subcontractor _____, hereby certifies that he has _____ has not _____, participated in a previous contract or subcontract subject to the Equal Opportunity Clause, as required by Executive Orders 10924, 11114, or 11246 and that he has _____, has not _____, filled with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements:

(Company)

By _____

Date _____

Title _____

NOTE: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b)(1)), and must be submitted by bidders and proposed subcontractors any in connection with the contracts and subcontracts which are subject to the Equal Opportunity Clause. Contracts and subcontracts which are exempt from the Equal Opportunity Clause are set forth in 41 CFR 60-15. Generally, only contracts or subcontracts of \$10,000.00 or under are exempt.

Currently, Standard Form 100 (EEO-11) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

AFFIDAVIT of NON-DISCRIMINATION
CONSTRUCTION SERVICES FOR
CHARLOTTE HOPE PLAZA PROJECT
P R O V I D E N C E , R H O D E I S L A N D

State of _____ ss.
County of _____

_____, being first duly sworn, deposes and says
that:

He is the _____ of _____
a corporation organized and existing under the Laws of _____ and the
Contractor for the _____

Project No. _____ that he makes this affidavit for and on behalf of said Corporation; that during the period
_____, 20__ to _____, 20__, the said corporation has maintained the

practices of employment as required by federal, state, and city laws in regards to the hiring of employees for the
aforementioned project and that in employment, upgrading, the demotion or transfer, recruitment or recruitment
advertising; layoffs or termination, rates of pay or other forms of compensation; and selection for training
including apprenticeship, that it has not discriminated against any employee or applicant for employment on the
work covered by this contract because of race, religion, color or national origin.

(Signed) _____

Title

Subscribed and sworn to before me this

_____ day of _____, 20__

(Signed) _____

Title

(Seal)

My Commission Expires _____, 20__

CERTIFICATION OF NON-DISCRIMINATION IN
EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION SERVICES FOR
CHARLOTTE HOPE PLAZA PROJECT

P R O V I D E N C E , R H O D E I S L A N D

CERTIFICATION OF NON-DISCRIMINATION IN EQUAL EMPLOYMENT OPPORTUNITY

The bidder represents the he/she has, _has not, participated in a previous contract or subcontract to either the equal opportunity clause contracted in Section 202 of the Executive Order 11246; that he/she has, has not, filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations; and that representations indicating submission of required compliance reports, signed by proposed subcontractors will be obtained prior to subcontract awards.

Company Name

BY: _____

Title: _____

Date

PROPOSED SUBCONTRACTORS
CONSTRUCTION SERVICES FOR
CHARLOTTE HOPE PLAZA PROJECT
P R O V I D E N C E , R H O D E I S L A N D

I, _____ the BIDDER, hereby propose to utilize the following named SUBCONTRACTORS for the CONSTRUCTION SERVICES FOR CHARLOTTE HOPE PLAZA PROJECT, Providence, RI. for the work items and/or estimated prices stated below and understand that the Owner reserves the right to reject any subcontractor if investigation determines they do not meet federal requirements or are otherwise unacceptable for the Project.

1. WORK ITEM/DESCRIPTION:

Estimated Value of Work \$ _____
Subcontractor: _____
Address: _____
City/State/Zip-Code: _____
Telephone No.: _____

2. WORK ITEM/DESCRIPTION:

Estimated Value of Work: \$ _____
Subcontractor: _____
Address: _____
City/State/Zip-Code: _____
Telephone No.: _____

3. WORK ITEM/DESCRIPTION:

Estimated Value of Work: \$ _____
Subcontractor: _____
Address: _____
City/State/Zip-Code: _____
Telephone No.: _____

4. WORK ITEM/DESCRIPTION:

Estimated Value of Work: \$ _____
Subcontractor: _____
Address: _____
City/State/Zip-Code: _____
Telephone No.: _____

APPENDIX G

[RESERVED]

APPENDIX H

"General Decision Number: RI20200001 07/24/2020

Superseded General Decision Number: RI20190001

State: Rhode Island

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

Counties: Rhode Island Statewide.

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

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020
1	01/24/2020
2	02/21/2020
3	03/06/2020
4	03/13/2020
5	05/01/2020
6	05/22/2020
7	06/05/2020
8	06/19/2020
9	07/24/2020

ASBE0006-006 12/01/2019

Rates Fringes

HAZARDOUS MATERIAL HANDLER
(Includes preparation,
wetting, stripping, removal
scrapping, vacuuming, bagging
& disposing of all insulation

materials, whether they contain asbestos or not, from mechanical systems).....\$ 36.60 22.40

ASBE0006-008 09/01/2019

Rates Fringes

Asbestos Worker/Insulator
Includes application of all insulating materials, protective coverings, coatings & finishes to all types of mechanical systems.\$ 43.60 29.90

BOIL0029-001 01/01/2017

Rates Fringes

BOILERMAKER.....\$ 42.42 24.92

BRRIO003-001 06/01/2020

Rates Fringes

Bricklayer, Stonemason, Pointer, Caulker & Cleaner.....\$ 42.55 28.02

BRRIO003-002 03/01/2020

Rates Fringes

Marble Setter, Terrazzo Worker & Tile Setter.....\$ 40.78 28.92

BRRIO003-003 03/01/2020

Rates Fringes

Marble, Tile & Terrazzo Finisher.....\$ 34.10 27.88

* CARP0330-001 06/05/2020

Rates Fringes

CARPENTER (Includes Soft Floor Layer).....\$ 39.13 28.60
Diver Tender.....\$ 40.13 28.60
DIVER.....\$ 50.73 28.60
Piledriver.....\$ 39.13 28.60
WELDER.....\$ 40.13 28.60

FOOTNOTES:

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

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

Work on exterior concrete shear wall gang forms, 45 ft. or

more above ground elevation or on setback: \$.50 per hour additional.

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

CARP1121-002 01/06/2020

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

ELEC0099-002 06/01/2020

	Rates	Fringes
ELECTRICIAN.....	\$ 41.61	57.24%
Teledata System Installer.....	\$ 31.21	13.10%+14.93

FOOTNOTES:

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

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

ELEV0039-001 01/01/2020

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 53.25	34.765+a+b

FOOTNOTES:

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

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

ENGI0057-001 06/01/2020

	Rates	Fringes
Operating Engineer: (power plants, sewer treatment plants, pumping stations, tunnels, caissons, piers, docks, bridges, wind turbines, subterranean & other marine and heavy construction work)		
GROUP 1.....	\$ 42.55	26.95+a
GROUP 2.....	\$ 40.55	26.95+a
GROUP 3.....	\$ 36.17	26.95+a
GROUP 4.....	\$ 33.32	26.95+a
GROUP 5.....	\$ 39.60	26.95+a
GROUP 6.....	\$ 30.40	26.95+a

GROUP 7.....	\$ 24.40	26.95+a
GROUP 8.....	\$ 36.25	26.95+a
GROUP 9.....	\$ 40.17	26.95+a

a. BOOM LENGTHS, INCLUDING JIBS:

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

a. PAID HOLIDAYS:

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

a. FOOTNOTES:

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

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, lighters, boom trucks and derricks

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

GROUP 3: Oilers on cranes.

GROUP 4: Oiler on crawler backhoe.

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

GROUP 6: Well-point installation crew.

GROUP 7: Utility Engineers and Signal Persons

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

GROUP 9: Boat & tug operator.

ENGI0057-002 05/01/2020

Rates Fringes

Power Equipment Operator
(highway construction
projects; water and sewerline

projects which are incidental to highway construction projects; and bridge projects that do not span water)

GROUP 1.....	\$ 35.70	26.95+a
GROUP 2.....	\$ 30.40	26.95+a
GROUP 3.....	\$ 24.40	26.95+a
GROUP 4.....	\$ 30.98	26.95+a
GROUP 5.....	\$ 34.68	26.95+a
GROUP 6.....	\$ 34.30	26.95+a
GROUP 7.....	\$ 29.95	26.95+a
GROUP 8.....	\$ 31.33	26.95+a
GROUP 9.....	\$ 33.28	26.95+a

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

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

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

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

GROUP 2: Well point installation crew

GROUP 3: Utlity engineers and signal persons

GROUP 4: Oiler on cranes

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

GROUP 6: Roller,skid steer loaders, street sweeper

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

GROUP 8: Stone crusher

GROUP 9: Mechanic & welder

 ENGI0057-003 06/01/2020

BUILDING CONSTRUCTION

	Rates	Fringes
Power Equipment Operator		
GROUP 1.....	\$ 41.82	26.95+a
GROUP 2.....	\$ 39.82	26.95+a
GROUP 3.....	\$ 39.60	26.95+a
GROUP 4.....	\$ 35.60	26.95+a
GROUP 5.....	\$ 32.75	26.95+a
GROUP 6.....	\$ 38.90	26.95+a
GROUP 7.....	\$ 38.47	26.95+a
GROUP 8.....	\$ 35.79	26.95+a

a. BOOM LENGTHS, INCLUDING JIBS:

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

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

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

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

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

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

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

GROUP 4: Fireman & oiler on cranes

GROUP 5: Oiler on crawler backhoe

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

GROUP 7: Well point installation crew

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

IRON0037-001 09/16/2019

	Rates	Fringes
IRONWORKER.....	\$ 36.27	28.98

LABO0271-001 06/02/2019

BUILDING CONSTRUCTION

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 31.80	25.05
GROUP 2.....	\$ 32.05	25.05

GROUP 3.....	\$ 32.55	25.05
GROUP 4.....	\$ 32.80	25.05
GROUP 5.....	\$ 33.80	25.05

LABORERS CLASSIFICATIONS

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

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

GROUP 3: Pre-Cast Floor & Roof Plank Erectors

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

GROUP 5: Toxic Waste Remover

LABO0271-002 06/02/2019

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
LABORER		
COMPRESSED AIR		
Group 1.....	\$ 49.23	23.50
Group 2.....	\$ 38.75	23.50
Group 3.....	\$ 51.23	23.50
FREE AIR		
Group 1.....	\$ 41.30	23.50
Group 2.....	\$ 38.75	23.50
Group 3.....	\$ 43.30	23.50
LABORER		
Group 1.....	\$ 31.80	23.05
Group 2.....	\$ 32.05	23.05
Group 3.....	\$ 32.80	23.05
Group 4.....	\$ 25.30	23.05
Group 5.....	\$ 33.80	23.05
OPEN AIR CAISSON, UNDERPINNING WORK AND BORING CREW		
Bottom Man.....	\$ 37.80	23.05
Top Man & Laborer.....	\$ 36.85	23.05
TEST BORING		
Driller.....	\$ 38.25	23.05
Laborer.....	\$ 36.85	23.05

LABORER CLASSIFICATIONS

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

GROUP 2: Adzeperson; Asphalt raker; Barcotype jumping tamper; Chain saw operators; Concrete and power buggy operator; Concrete saw operator; Demolition burner; Fence

and guard rail erector; Highway stone spreader; Laser beam operator; Mechanical grinder operator; Mason tender; Mortar mixer; Pneumatic tool operator; Riprap and dry stonewall builder; Scaffold erector; Setter of metal forms for roadways; Wagon drill operator; Wood chipper operator; Pipelayer; Pipe trench bracer

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

GROUP 4: Flagger & signaler

GROUP 5: Toxic waste remover

LABORER - COMPRESSED AIR CLASSIFICATIONS

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

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

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

LABORER - FREE AIR CLASSIFICATIONS

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

GROUP 2: Change house attendant, powder watchperson

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

 PAIN0011-005 06/01/2020

	Rates	Fringes
PAINTER		
Brush and Roller.....	\$ 35.62	22.55
Epoxy, Tanks, Towers, Swing Stage & Structural Steel.....	\$ 37.62	22.55
Spray, Sand & Water Blasting.....	\$ 38.62	22.55
Taper.....	\$ 36.37	22.55
Wall Coverer.....	\$ 36.12	22.55

 PAIN0011-006 06/01/2020

	Rates	Fringes
GLAZIER.....	\$ 39.18	22.55

FOOTNOTES:

SWING STAGE: \$1.00 per hour additional.

PAID HOLIDAYS: Labor Day & Christmas Day.

PAIN0011-011 06/01/2020

	Rates	Fringes
Painter (Bridge Work).....	\$ 52.25	22.55

PAIN0035-008 06/01/2011

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

PLAS0040-001 06/03/2019

BUILDING CONSTRUCTION

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

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

PLAS0040-002 07/01/2019

HEAVY AND HIGHWAY CONSTRUCTION

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

PLAS0040-003 07/01/2019

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

PLUM0051-002 03/02/2020

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 43.69	30.05

ROOF0033-004 06/01/2020

	Rates	Fringes
ROOFER.....	\$ 39.15	27.31

SFRI0669-001 01/02/2020

	Rates	Fringes
SPRINKLER FITTER.....	\$ 45.67	24.74

SHEE0017-002 12/01/2019

	Rates	Fringes
Sheet Metal Worker.....	\$ 37.13	36.38

TEAM0251-001 05/01/2019

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
TRUCK DRIVER		
GROUP 1.....	\$ 27.96	26.8525+A+B+C
GROUP 2.....	\$ 27.61	26.8525+A+B+C
GROUP 3.....	\$ 27.66	26.8525+A+B+C
GROUP 4.....	\$ 27.71	26.8525+A+B+C
GROUP 5.....	\$ 27.81	26.8525+A+B+C
GROUP 6.....	\$ 28.21	26.8525+A+B+C
GROUP 7.....	\$ 28.41	26.8525+A+B+C
GROUP 8.....	\$ 27.91	26.8525+A+B+C
GROUP 9.....	\$ 28.16	26.8525+A+B+C
GROUP 10.....	\$ 27.96	26.8525+A+B+C

FOOTNOTES:

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

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

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

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

TRUCK DRIVER CLASSIFICATIONS

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

GROUP 2: Two-axle on low beds

GROUP 3: Two-axle dump truck

GROUP 4: Three-axle dump truck

GROUP 5: Four- and five-axle equipment

GROUP 6: Low-bed or boom trailer.

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

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

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

GROUP 10: Tractor trailer

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

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

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

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

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

Union prevailing wage rates are updated to reflect all rate

changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

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

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

Union Average Rate Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

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

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

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

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the

Branch of Construction Wage Determinations. Write to:

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

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

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

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

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

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

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

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END OF GENERAL DECISION"

APPENDIX I

FORM OF BID
CONSTRUCTION SERVICES FOR
CHARLOTTE HOPE PLAZA PROJECT
P R O V I D E N C E , R H O D E I S L A N D

IN RESPONSE TO REQUEST FOR PROPOSALS FOR
CONSTRUCTION SERVICES RELATED TO
THE CHARLOTTE HOPE PLAZA PROJECT

DATE:

TO: PROVIDENCE REDEVELOPMENT AGENCY c/o
Bonnie Nickerson, Executive Director
444 Westminster Street, Suite 3A
Providence, RI 02903

PROJECT: 50 Sims Avenue, Providence, RI

SUBMITTED BY:

The undersigned, having familiarized (himself) (herself) (themselves) (itself) with existing conditions at the CONSTRUCTION SERVICES FOR CHARLOTTE HOPE PLAZA PROJECT site affecting the cost of work, and with the Contract Documents (which includes the Invitation for Bids, Instructions to Bidders, Form of Bid, Form of Bid Bond, Form of Agreement, Form of Non- Collusive Affidavit, Addenda (if any), Drawings, Technical Specifications, Surety Bond(s); as prepared by the Providence Redevelopment Agency, and on file in the office of the Providence Redevelopment Agency at 444 Westminster Street, Suite 3A, Providence, RI 02903, hereby proposes to furnish all supervision, technical personnel, labor, materials, machinery, tools, equipment and services including utility and transportation services, and to perform and complete all required work for the CONSTRUCTION SERVICES FOR CHARLOTTE HOPE PLAZA PROJECT and such other required and incidental work, complete, all in accordance with the above listed documents and for the unit prices for work in-place for the following items and quantities.

Total of Bid - For the sum of: \$ _____

Dollars

In submitting this Bid, the Bidder understands that the right is reserved by the Providence Redevelopment Agency to reject any and all Bids. If written notice of acceptance of this Bid is mailed, telegraphed or delivered to the undersigned within (90) days after the opening thereof, or at any time thereafter before this Bid is withdrawn, the undersigned agrees to execute and deliver an Agreement in the prescribed form and furnish the required bond within ten (10) days after the Agreement is presented to him/her for signature.

Security in the sum of _____ Dollars
(\$ _____), in the form of _____ is submitted
herewith in accordance with the Instructions to Bidders.

Attached hereto is an affidavit in proof that the undersigned has not colluded with any person in respect to this Bid or any Bids for the Contract for which this Bid is submitted. Also attached is a Statement of Bidder's Qualifications.

The Bidder is prepared to submit a financial and experience statement upon request.

If applicable unit prices are contained in the Agreement (established as the result of either a Unit Price, the Agency may order the Contractor to proceed with desired changes in the work, the value of such changes to be determined by the measured quantities involved and the applicable unit prices specified in the Contract; provided that in case of a unit price contract the net value of all changes does not increase or decrease the original total amount shown in the Agreement by more than twenty-five percent (25%).

Bidder Signature and Acknowledgement of Addenda:

DATE _____, 20 ____

Official Address:

Name of Bidder (Firm):

By _____
(Signature)

Title _____

Bidder shall indicate, in space provided,
the earliest possible Project Start-up Date:

_____, 20 ____

APPENDIX J

GENERAL CONDITIONS

CONSTRUCTION SERVICES FOR

CHARLOTTE HOPE PLAZA PROJECT

P R O V I D E N C E , R H O D E I S L A N D

100. BRIEF SCOPE OF WORK

The Project involves the construction of three connected parking areas in support of the renovation and repurposing of an abandoned industrial building located at 50 Sims Avenue in Providence, Rhode Island. The parking areas are located adjacent to the site at 460 Kinsley Avenue and 23 Charlotte Hope Street. The subject parcels are owned by the Providence Redevelopment Agency (PRA) and are located on Assessor's Plat 027, Lots 285, 286 and 293. The project is located on one of the six brownfield sites along the Woonasquatucket Corridor that are highlighted by The Woonasquatucket Vision Plan. The PRA is proposing to make parking and access improvements in support of the site's redevelopment. Specifically, the project consists of the following: a primary 0.7± acre parking area to accommodate 98 parked vehicles, including 4 ADA compliant spaces; a secondary 0.16± acre parking area to accommodate 18 parked vehicles, including 1 ADA compliant space; a third 0.4± acre parking area within the abandoned Watson Street to accommodate 48 parked vehicles, including 1 ADA compliant space; associated landscaping and pedestrian accommodations; temporary soil erosion and sedimentation control measures during construction; onsite low-impact stormwater treatment. The Project will serve an approximately 3.54-acre former industrial site to be redeveloped for food/beverage production, co-working, fabrication, and/or light commercial uses.

101. DEFINITIONS

Whenever used in any of the Contract Documents, the following meanings shall be given to the terms defined:

- A. The term "Contract" means the Contract executed by the Local Public Agency and the Contractor, of which these GENERAL CONDITIONS form a part thereof.
- B. The terms "Local Public Agency" and "LPA" mean the **PROVIDENCE REDEVELOPMENT AGENCY - CITY OF PROVIDENCE** which is authorized to undertake this Contract.
- C. The term "Contractor" means the person, firm or corporation entering into the Contract with the Local Public Agency to construct and install the improvements embraced in this Contract.
- D. The term "Project Area" means the site of the **CONSTRUCTION SERVICES FOR CHARLOTTE HOPE PLAZA PROJECT** within the City of Providence which are the specified Contract limits of the improvements contemplated to be constructed in whole or in part under this Contract. The Project Area shall be considered the City of Providence boundaries.
- E. The term "Design Engineer" means **Vanasse Hangen Brustlin, Inc., 1 Cedar Street, Suite 400, Providence, Rhode Island 02903-1023**. The term "Engineer" means any qualified person or persons, employed by the Local Public Agency for the purpose of directing or having in charge the work of Site Improvements embraced in this Contract, the said Engineer acting directly or indirectly through any Assistant Engineer having general charge of the work or through any assistant having immediate charge of a portion thereof limited by the particular duties entrusted to him.
- F. The term "Local Government" means the City of Providence, a municipal corporation, in City of Providence, Rhode Island, within which the Project Area is situated.
- G. The term "Contract Documents" means and shall include the following: Executed Agreement, Addenda, (if any), Invitation for Bids, Instructions to Bidders, Signed Copy of Bid, General Conditions, Special Conditions, General Contract Provisions, Technical Specifications, and Drawings.
- H. The term "Drawings" means the drawings found attached to the Scope of Work.
- I. The term "Technical Specifications" means that part of the Contract Documents which describes, outlines and stipulates: the quality of the materials to be furnished; the quality of workmanship required; and the methods to be used in carrying out the construction work to be performed under this Contract.
- J. The term "Addendum" or "Addenda" means any and all appendices found or referenced in the Contract and or the request for proposals upon which submissions are proposed.
- K. Wherever in the specifications or upon the contract drawings the words directed, required, permitted, ordered instructed, designated, considered necessary, or words of like import are used, it shall be understood that the direction, requirement, permission, order, instructions, designation or decision of the Engineer is intended; where as shown, as indicated, as detailed or words of similar import are used, it shall be understood that reference to the drawings accompanying these specifications is made unless otherwise stated; and similarly the words approved, acceptable, satisfactory, or words of like import shall mean approved by, or acceptable, or satisfactory to the Engineer. As used herein "provided" shall be understood to mean "provided complete in place", that is "furnished and installed complete".

102. SUPERINTENDENCE BY CONTRACTOR

- A. Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, satisfactory to the Local Public Agency and the Engineer, on the work at all times during working hours with full authority to act for him. The Contractor shall also provide an adequate staff for the proper coordination and expediting of his work.
- B. The Contractor shall lay out his own work and he shall be responsible for all work executed by him under the Contract. He shall verify all figures and elevations before proceeding with the work and will be held responsible for any error resulting from his failure to do so.

103. SUBCONTRACTS

- A. The Contractor shall not execute an agreement with any subcontractor or permit any subcontractor to perform any work included in this contract until he has submitted a non-collusion affidavit from the subcontractor in substantially the form shown below and has received written approval of such subcontractor from the Local Public Agency. (See Non-Collusion Affidavit for Subcontractor in Bidding Documents section)
- B. No proposed subcontractor shall be disapproved by the Local Public Agency except for cause.
- C. The Contractor shall be as fully responsible to the Local Public Agency for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them as he is for the acts and omissions of persons directly employed by him.
- D. The Contractor shall cause appropriate provision to be inserted in all subcontracts relative to the work to require compliance by each subcontractor with the applicable provisions of the Contract for the improvements embraced in the Site Preparation.
- E. Nothing contained in the Contract shall create any contractual relation between any subcontractor and the Local Public Agency.

104. OTHER CONTRACTS

The Local Public Agency may award, or may have awarded other contracts for additional work, and the Contractor shall cooperate fully with such other Contractor, by scheduling his own work with that to be performed under other Contracts as may be directed by the Local Public Agency. The Contractor shall not commit or permit any act, which will interfere with the performance of work by any other Contractor as scheduled.

105. FITTING AND COORDINATION OF THE WORK

The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, subcontractors, or materialmen engaged upon this Contract. He shall be prepared to guarantee to each of his subcontractors the locations and measurements which they may require for the fitting of their work to all surrounding work.

106. MUTUAL RESPONSIBILITY OF CONTRACTORS

If, through acts or neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor shall settle with such other Contractor or subcontractor by agreement or arbitration, if such other Contractor or subcontractor will so settle. If such other Contractor or subcontractor shall assert any claim against the Local Public Agency on account of any damage alleged to have been so sustained, the Local Public Agency will notify this Contractor, who shall defend at his own expense any suit based upon such claim, and, if any judgment or claims against the Local Public Agency shall be allowed, the Contractor shall pay or satisfy such judgment or claim and pay all costs and expenses in connections therewith.

107. PROGRESS SCHEDULE

The Contractor shall submit for approval immediately after execution of the Agreement, a carefully prepared Progress Schedule, showing the proposed dates of starting and completing each of the various sections of the work, the anticipated monthly payments to become due the Contractor, and the accumulated percent of progress each month. Every two weeks, the Contractor shall update and submit the progress schedules for review by the City. Failure to maintain the progress schedule will be cause to withhold payments due to the Contractor.

108. COMPENSATION AND PAYMENTS TO CONTRACTOR

Compensation:

- A. The Local Public Agency will pay and the Contractor shall receive as full compensation for everything furnished and done by the Contractor under this contract, including all work required but not specifically included in any items herein mentioned, and also for all loss or damage arising out of the nature of the work

aforesaid, or from the action of the elements, or from any unforeseen obstruction or difficulty encountered in the prosecution of the work, and for all risks of every description connected with the work, and for all expenses incurred by or in consequence of the suspension or discontinuance of the work as herein specified, and for assuming all duties and liabilities required herein, and for well and faithfully completing the work, and the whole thereof, and herein provided, the unit prices and lump sum prices set opposite the respective items in the accepted bid form herein contained and payment for extra work as herein provided.

- B. Unit prices shall be based on a schedule dividing the project into component parts, together with a quantity and price for each part such that the sum of the product prices and quantities will equal the Base Bid total. A final schedule shall be submitted by the Contractor for the approval of the Local Public Agency before the first estimate becomes due.
- C. The amount of the contract (accepted bid prices) listed in the bid is based on the estimated quantities and the unit and/or lump sum bid prices as set forth in the bid. It is understood and agreed that the Contractor will accept as payment the actual measured quantities at the unit and/or lump sum bid prices as set forth in the accepted bid.
- D. The estimated quantities given in the bid (proposal) for the various items of work are given for the purpose of comparing proposals offered for the work under this contract and if it is found in the performance of the contract work that any or all of the said estimated quantities are not even approximately correct, the Contractor shall have no claim for anticipated profits, or for loss of profits or for increase in prices as listed in the accepted bid because of the difference between the quantities of the various items of work actually done and the estimated quantities stated in the accepted bid (proposal) except as provided for in Section 109 hereof.
- E. It is understood that, except as otherwise specifically stated in the contract documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to protect, execute, complete and deliver the work within the specified time.
- F. Any work necessary to be performed after regular working hours, on Saturdays, Sundays and legal holidays, shall be performed by the Contractor without additional expense to the Local Public Agency.

Partial Payments:

- A. The Contractor shall prepare his requisition for partial payment monthly, at a date to be specified by the Local Public Agency, and submit it, with the required number of copies to the Engineer for his approval. The amount of the payment due the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting (1) five percent (5%) of the total amount, to be retained until final payment and (2) the amount of all previous payments. The total value of work completed to date shall be based on the actual quantities of work completed and on the unit prices contained in the agreement. For lump sum items the value of the work completed to date will be based on the actual amount of the work done and the schedule required to be submitted by the Contractor in paragraph 108-l.b. above. The value of materials properly stored on the site shall be based upon the estimated quantities of such materials and the invoice prices. Copies of all invoices shall be available for inspection of the Engineer.
- B. Monthly or partial payments made by the Local Public Agency to the Contractor are monies advanced for the purpose of assisting the Contractor to expedite the work of construction. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the Local Public Agency. Such payments shall not constitute a waiver of the right of the Local Public Agency to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the Local Public Agency.

THE LOCAL PUBLIC AGENCY, PRIOR TO MAKING EACH PAYMENT TO THE CONTRACTOR, may require the Contractor to furnish releases or receipts from any or all persons / firms performing work and supplying material or services to the Contractor, or any subcontractor, if this is deemed necessary to protect its interest. Additionally, the Contractor may be required to submit certified payrolls for any and all employees, including subcontractors.

Final Payment:

- A. After final inspection and acceptance by the Local Public Agency of all work under the Contract, the Contractor shall prepare his requisition for final payment which shall be based upon the carefully measured or computed quantity of each item of work at the applicable unit prices stipulated in the Agreement. The total amount of the final payment due the Contractor under this contract shall be the amount computed as described above less all previous payments. Final payment to the Contractor shall be made subject to his furnishing the Local Public Agency with a release in satisfactory form of all claims against the Local Public Agency arising under and by virtue of his contract, other than such claims, if any as may be specifically excepted by the Contractor from the operation of the release as provided under Section 113 hereof.
- B. The Local Public Agency, before paying the final estimate, may require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor, if the Local Public Agency deems the same necessary in order to protect its interest. The Local Public Agency, however, may if it deems such action advisable, make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments so made shall in nowise impair the obligations of any surety or sureties furnished under this Contract.

- C. Withholding of any amount due the Local Public Agency under Section 403, entitled "Liquidated Damages", under SPECIAL CONDITIONS, shall be deducted from the final payment due the Contractor.

Withholding Payments:

The Local Public Agency may withhold from any payment otherwise due the Contractor so much as may be necessary to protect the Local Public Agency and if it so elects may also withhold any amounts due from the Contractor to any subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Local Public Agency and will not require the Local Public Agency to determine or adjust any claims or disputes between the Contractor and his subcontractors or material dealers, or to withhold any monies for their protection unless the Local Public Agency elects to do so. The failure or refusal of the Local Public Agency to withhold any monies from the Contractor shall in no wise impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

Payments Subject to Submission of Materials Certificates and Materials Testing:

Each payment to the Contractor by the Local Public Agency shall be made subject to submission by the Contractor of all written certifications required of him and his subcontractors. Materials and associated bid items found to be deficient by the City's Design Engineer will not be paid until defective materials have been replaced.

Payments Subject to Reporting Requirements:

Each payment to the Contractor by the Local Public Agency (LPA) shall be made after satisfactory reporting is submitted for U.S. EDA requirements and any other reporting as stated at the pre-construction meeting. Payment to the Contractor by the LPA is also contingent upon receipt of updated and accurate project construction schedules.

Payments Subject to Certified Payroll Requirements:

Complete and executed certified payroll statements are required to be submitted with all invoice requests. Failure to do so will result in non-payment until certified payrolls are received.

Payments Subject to Progress Schedule

Each payment to the Contractor by the Local Public Agency shall be made subject to submission of a current, accurate and reasonable progress schedule. Failure to do so will result in non-payment until a progress schedule is received and accepted.

109. CHANGES IN THE WORK

- A. The Local Public Agency may make changes in the scope of the work required to be performed by the Contractor under the Contract or making additions thereto, or by omitting work therefrom, without invalidation of the Contract, and without relieving or releasing the Contractor from any of his obligations under the Contract or any guarantee given by him pursuant to the Contract provisions, and without affecting the validity of the guaranty bonds, and without relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of the original Contract unless it is expressly provided otherwise.
- B. Except for the purpose of affording protection against any emergency endangering health, life, limb or property, the Contractor shall make no change in the materials used or in the specified manner of constructing and/or installing the improvements or supply additional labor, services or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the Local Public Agency authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract Price will be valid unless so ordered.
- C. If applicable unit prices are contained in the Contract (established as a result of either a unit price bid or a Supplemental Schedule of Unit Prices) the Local Public Agency may order the Contractor to proceed with desired changes in the work, the value of such changes to be determined by the measured quantities involved and the applicable unit prices specified in the Contract; provided that in case of a unit price contract the net value of all changes does not increase or decrease the original total amount shown in the Agreement by more than **twenty-five percent (25%)** in accordance with the Contract Documents.
- D. If applicable unit prices are not contained in the Contract or if the total net change increases or decreases the total Contract Price more than **twenty-five percent (25%)** the Local Public Agency shall, before ordering the Contractor to proceed with desired changes, request an itemized proposal from him covering the work involved in the change after which the procedure shall be as follows:
- (1) If the proposal is acceptable the Local Public Agency will prepare the change order in accordance there with for acceptance by the Contractor and
 - (2) If the proposal is not acceptable and prompt agreement between the two parties cannot be reached, the Local Public Agency may order the Contractor to proceed with the work on a cost-plus-limited basis, defined as the net cost of the Contractor's labor, materials and insurance plus fifteen percent (15%) of said net cost to cover overhead and profit, the total cost not to exceed a

specified limit.

- E. Each change order shall include in its final form:
 - (1) A detailed description of the change in the work.
 - (2) The Contractor's proposal (if any) or a conformed copy thereof.
 - (3) A definite statement as to the resulting change in the contract price and/or time.
 - (4) The statement that all work involved in the change shall be performed in accordance with contract requirements except as modified by the change order.

110. CLAIMS FOR EXTRA COST

- A. If the Contractor claims that any instructions by Drawings or otherwise involve extra cost or extension of time, he shall, within ten days after the receipt of such instructions, and in any event before proceeding to execute the work, submit his protest thereto in writing to the Local Public Agency, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.
- B. Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, will not be recognized unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material, or performing more work, than would be reasonably estimated from the Drawings and maps issued.
- C. Any discrepancies which may be discovered between actual conditions and those represented by the Drawings and maps shall at once be reported to the Local Public Agency and work shall not proceed except at the Contractor's risk, until written instructions have been received by him from the Local Public Agency.
- D. If, on the basis of the available evidence, the Local Public Agency determines that an adjustment of the Contract Price and/or Time is justifiable, the procedure shall be as provided in Section 109 hereof.

111. TERMINATION, DELAYS, AND LIQUIDATED DAMAGES

- A. Termination of Contract: If the Contractor or any of his subcontractors refuses or fails to prosecute the work with such diligence as will insure its completion within the time specified in these Contract Documents, or as modified as provided in these Contract Drawings, or violates any other Provisions of this Contract, the Local Public Agency, by written notice to the Contractor, may terminate the Contractor's right to proceed with the work. Upon such termination, the Local Public Agency may take over the work and prosecute the same to completion, by contract or otherwise, and the Contractor and his sureties shall be liable to the Local Public Agency for any additional cost incurred by the Local Public Agency in its completion of the work and they shall also be liable to the Local Public Agency for liquidated damages for any delay in the completion of the work as provided below. If the Contractor's right to proceed is so terminated, the Local Public Agency may take possession of and utilize in completing the work such materials, tools, equipment, and plant as may be on the site of the work and necessary therefor.
- B. **Liquidated Damages for Delays:** If the work is not completed within the time stipulated in the SPECIAL CONDITIONS, Section 402, including any extensions of time for excusable delays as herein provided, the Contractor shall pay to the Local Public Agency as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) for each calendar day of delay, until the work is completed, the amount as set forth in SPECIAL CONDITIONS, Section 403, and the Contractor and his sureties shall be liable to the Local Public Agency for the amount thereof.
- C. **Excusable Delays:** The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due:
 - (1) To any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, National Defense, or any other national emergency;
 - (2) To any acts of the Local Public Agency;
 - (3) To causes not reasonably foreseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to acts of God or of the public enemy, acts of another Contractor in the performance of some other contract with the Local Public Agency, fires, floods, epidemics, quarantine, restriction, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones, and other extreme weather conditions; and
 - (4) To any delay of any subcontractor occasioned by any of the causes specified in subparagraphs (1), (2) and (3) of this paragraph "C". Provided, however, that the Contractor promptly notify the Local Public Agency within ten (10) days in writing of the cause of the delay. Upon receipt of such notification the Local Public Agency shall ascertain the facts and the cause and extent of delay. If, upon the basis of the facts and the terms of this contract, the delay is properly excusable, the Local Public Agency shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

112. ASSIGNMENT OR NOVATION

The Contractor shall not assign or transfer, whether by an assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the Local Public Agency; provided, however, that assignments to banks, trust companies, or other financial institutions may be made without the consent of the Local Public Agency. No assignment or novation of this Contract shall be valid unless the assignment or novation expressly provides that the assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered, and materials, tools, and equipment supplied for the performance of the work under this Contract in favor of all persons, firms, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

113. DISPUTES

- A. All disputes arising under this contract or its interpretation except those disputes covered by U.S. EDA Contracting Provisions for Construction Projects, whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall within ten (10) days of commencement of the dispute be presented by the Contractor to the Local Public Agency for decision. All papers pertaining to claims shall be filed in quadruplicate. Such notice need not detail the amount of the claim but shall state the facts surrounding the claim in sufficient detail to identify the claim, together with its character and scope. In the meantime, the Contractor shall proceed with the work as directed. Any claim not presented within the time limit specified this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of its commencement, the claim will be considered only for a period commencing ten (10) days prior to the receipt by the Local Public Agency of notice thereof.
- B. The Contractor shall submit in detail his claim and his proof thereof. Each decision by the governing body of the Local Public Agency will be in writing and will be mailed to the Contractor by registered or certified mail, return receipt requested, directed to his last known address.
- C. If the Contractor does not agree with any decision of the Local Public Agency, he shall in no case allow the dispute to delay the work but shall notify the Local Public Agency promptly that he is proceeding with the work under protest and he may then except the matter in question from the final release.

114. TECHNICAL SPECIFICATIONS AND DRAWINGS

Anything mentioned in the Technical Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Technical Specifications, shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in Drawings, or Technical Specifications, the matter shall be immediately submitted to the Local Public Agency, without whose decision, said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

115. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

It shall be the responsibility of the Contractor to make timely requests of the Local Public Agency for any additional information not already in his possession which should be furnished by the Local Public Agency under the terms of this Contract, and which he will require in the planning and execution of the work. Such requests may be submitted from time to time as the need is approached, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. The additional drawings and instructions thus supplied to the Contractor will coordinate with the Contract and instructions thus supplied to the Contractor will coordinate with the Contract Documents and will be so prepared so that they can be reasonably interpreted as part thereof. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions. The Contractor and the Engineer will prepare jointly a schedule, fixing the dates at which special detail drawings will be required, such drawings if any, to be furnished by the Engineer in accordance with said schedule, and a schedule fixing the respective dates for the submission of shop drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment, and the completion of the various parts of the work; each such schedule to be subject to change from time to time in accordance with the progress of the work. The Contractor shall, if requested, furnish promptly any assistance and information the Engineer may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provisions of this Section.

116. SHOP DRAWINGS

- A. The Contractor shall submit promptly to the Design Engineer three (3) copies of each shop drawing, machinery or equipment details, layout drawings, or setting drawing, etc., prepared in accordance with the schedule predetermined as aforesaid. After examination of such drawings by the Design Engineer and the return one (1) thereof, the Contractor shall make such corrections to the drawings as have been indicated and shall furnish additional copies. Regardless of corrections made in or approval given to such drawings by the Design Engineer, the Contractor will nevertheless be responsible for the accuracy of such drawings and for their conformity to the drawings and specifications, unless he notifies the Design Engineer in writing of any deviations at

- the time he furnishes such drawings.
- B. Shop drawings of all fabricated work shall be submitted to the Design Engineer for approval and no work shall be fabricated by the Contractor save at his own risk until approval has been given.
 - C. The Contractor shall submit all shop and setting drawings and dates sufficiently in advance of requirements to enable the Design Engineer ample time for checking same, including time for correction, resubmission and recheck if necessary, and no claim for delay will be granted the Contractor by reason of his failure in this respect.
 - D. All shop drawings submitted must bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission. If the shop drawings show variations from the requirements of the contract documents because of standard shop practice or other reason, the Contractor shall make specified mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment; otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the contract documents even though such shop drawings have been approved.
 - E. Where shop drawings are submitted by the Contractor that indicate a departure from the contract which the Design Engineer deems to be a minor adjustment in his interest and not involving a change in the contract price or extension of time, the Design Engineer may approve the drawings by the approval will contain, in substance, the following:
 - The modification shown on the attached drawings is approved in the interest of the Local Public Agency to effect an improvement for the Project and is ordered with the understanding that it does not involve any change in the Contract price or time; that it is subject generally to all Contract stipulations and covenants; and that it is without prejudice to any and all rights of the Local Public Agency under the contract and surety bond or bonds.
 - F. The approval of shop drawings will be general and shall not relieve the Contractor from the responsibility for adherence to the contract nor shall it relieve him of the responsibility for any error which may exist.
 - G. The Contractor agrees to hold the Design Engineer and the Local Public Agency harmless and defend them against damages or claims for damages arising out of injury to others or property of third persons which result from errors on shop, working or setting drawings whether or not the same have been approved by the Design Engineer and/or the Local Public Agency.

117. MATERIALS AND WORKMANSHIP

- A. Unless otherwise specifically provided for in the Technical Specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles or workmanship are referred to in the Technical Specifications as "equal to" any particular standard, the Engineer shall decide the question of equality. Whenever a material or article required is specified or shown on the drawings by using the name of the proprietary product or of a particular manufacturer or vendor, any material or article which will perform adequately the duties imposed by the general design may be considered equal and satisfactory providing the material or article so proposed is of equal substance and function in the opinion of the Engineer. It shall not be purchased or installed without his written approval. In all cases, new material shall be used in the project. If two or more brands, makes or material, devices or equipment are shown or specified, each should be regarded as the approved equal of the other. Any other brand, make of material, device or equipment, which in the opinion of the Engineer or his authorized agent, is the recognized approved equal of that specified, considering quality, workmanship and economy of operation and is suitable for the purpose intended, may be accepted.
- B. The Contractor shall furnish to the Local Public Agency for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which he contemplates installing together with full information as to type, performance characteristics, and all other pertinent information as required, and shall likewise submit for approval as required full information concerning all other materials or articles which he proposes to incorporate in the work. (See Section 118 hereof).
- C. Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejection.
- D. Materials specified by reference to the number or symbol of a specific standard, such as an A.S.T.M. Standard, a Federal Specification or other similar standard, shall comply with requirements in the latest revision thereof any amendment or supplement thereto in effect on the date of the invitation for Bids, except as limited to type, class or grade, or modified in such reference. The Standards referred to, except as modified in the Technical Specifications shall have full force and effect as though printed therein.
- E. The Local Public Agency may require the Contractor to dismiss from the work such employee or employees as the Local Public Agency or the Engineer may deem incompetent, or careless, or insubordinate.

118. SAMPLES, CERTIFICATIONS AND TESTS

- A. The Contractor shall submit all material or equipment samples, certificates, affidavits, etc., as called for in the contract documents, or required by the Engineer, promptly after award of the contract and acceptance of the

Contractor's bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the Engineer. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the contract time.

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

- B. Approval of any materials shall be general only, and shall not constitute a waiver of the Local Public Agency's right to demand full compliance with the contract documents after actual deliveries, the Engineer will have such check tests made as he deems necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the Engineer will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable.
- C. Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:
 - (1) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the Engineer or testing agency, however, the Contractor shall cooperate with and assist the Engineer or testing agency in the taking of samples on the project where the taking of samples is deemed necessary by the Engineer.
 - (2) The Contractor shall assume all costs of retesting materials which fail to meet contract requirements;
 - (3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient;
 - (4) All other expenses for testing of materials will be paid for by the Local Public Agency.
- D. Testing and inspection of the various materials, equipment, or articles, etc., heretofore mentioned shall be performed by testing agency or agencies selected by the Local Public Agency.
- E. Payments to the testing agency or agencies shall be paid for by the Local Public Agency.

119. PERMITS AND LICENSES

- A. The Contractor shall give all notices required by and comply with all applicable laws, ordinances, standard requirements, and codes of the Local Government. All construction work and/or utility installation shall comply with all applicable ordinances, standard requirements, and codes including all written waivers. Before installing any work, the Contractor shall examine the Drawings and Technical Specifications for compliance with applicable ordinances, standard requirements and codes and shall immediately report any discrepancy to the Local Public Agency. Where the requirements of the Drawings and Technical Specifications fail to comply with such applicable ordinances, standard requirements, or codes, the Local Public Agency will adjust the Contract by Change Order to conform to such ordinances, standard requirements, or codes (unless waivers in writing covering the difference have been granted by the governing body or department) and make appropriate adjustment in the Contract Price or stipulated prices. Should the Contractor fail to observe the foregoing provisions and proceed with the construction and/or install any utility at variance with any applicable ordinance, standard requirement, or code, including any written waivers (notwithstanding the fact that such installation is in compliance with the Drawings and Technical Specifications), the Contractor shall remove such work without cost to the Local Public Agency, but a Change Order will be issued to cover only the excess cost the Contractor would have been entitled to receive if the change had been made before the Contractor commenced work on the items involved.
- B. The Contractor shall, at his own expense, secure and pay to the appropriate department of the Local Government the fees or charges for all permits for street pavement, sidewalks, sheds, removal of abandoned water taps, sealing of house connection drains, pavement cuts, buildings, electrical, plumbing, water, gas and sewer permits required by the local regulatory body or any of its agencies.
- C. The Contractor shall comply with applicable local laws and ordinances governing the disposal of surplus excavation, materials, debris and rubbish on or off the Project Area and commit no trespass on any public or private property in any operation due to or connected with the Improvements embraced in this Contract.

120. CARE OF WORK

- A. The Contractor shall be responsible for all damages to person or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the Local Public Agency.
- B. The Contractor shall provide at his own expense sufficient competent watchmen, both day and night, including Saturday, Sundays, and holidays, from the time the work is commenced until final completion and

acceptance.

- C. In an emergency affecting the safety of life, limb or property, including adjoining property, the Contractor, without special instructions or authorization from the Local Public Agency, is authorized to act at his discretion to prevent such threatened loss or injury, and he shall so act. He shall likewise act if instructed to do so by the Local Public Agency. Any compensation claimed by the Contractor on account of such emergency work will be determined by the Local Public Agency as provided in the General Conditions, Section 109.
- D. The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and he shall at his own expense completely repair any damage thereto caused by his operations.
- E. The Contractor shall shore up, brace, underpin, secure, and protect as may be necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the Improvements embraced in this Contract. The Contractor shall be responsible for giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the Local Public Agency from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the Local Public Agency may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

121. ACCIDENT PREVENTION AND JOB SAFETY

- A. The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work. The safety provisions of applicable laws and building and construction codes shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as the Local Public Agency may determine to be reasonable necessary. Further, the Contractor shall comply, and shall cause all subcontractors to comply with all applicable provisions of the U.S. Department of Labor "Williams-Steiger Occupational Safety and Health Act of 1970."
- B. The Contractor shall maintain an accurate record of all cases of death, occupational disease, or injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor shall promptly furnish the Local Public Agency with reports concerning these matters.
- C. The Contractor shall indemnify and save harmless the Local Public Agency and the Engineer from any claims for damages resulting from property damage, personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this contract.

122. SANITARY FACILITIES

The Contractor shall furnish, install, and maintain ample sanitary facilities for the workmen. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes of the State and Local Government. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

Sanitary facilities shall not be placed in the Public Right-of-Way.

123. USE OF PREMISES

- A. The Contractor shall confine his equipment, storage of materials, and construction operations to the Contract Limits as shown on the Drawings and as prescribed by ordinances or permits, or as may be desired by the Local Public Agency, and shall not unreasonably encumber the site or public rights-of-way with his materials and construction equipment.
- B. The Contractor shall comply with all reasonable instructions of the Local Public Agency and the ordinances and codes of the Local Government, regarding signs, advertising, traffic, fires, explosives, danger signals and barricades.
- C. The Contractor is not permitted to store equipment or stockpiles in the Public Right-of-Way.

124. REMOVAL OF DEBRIS, CLEANING, ETC.

The Contractor shall, periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights-of-way reasonably clear. Upon completion of the work, he shall remove all temporary construction facilities, debris and unused materials provided for the work and put the whole site to the work and public rights-of-way in a neat and clean condition. No trash burning will be permitted on the site of the work. The Contractor shall obey all Local Public Agency and existing State and local

regulations.

125. INSPECTION

- A. All materials and workmanship shall be subject to inspection, examination, or test by the Local Public Agency and the Engineer at any and all times during manufacture or construction and at any and all places where such manufacture or construction is carried on. The Local Public Agency shall have the right to reject defective material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected. Rejected material shall be promptly segregated and removed from the Project Area and replaced with material of specified quality without charge therefor. If the Contractor fails to proceed at once with the correction of rejected workmanship or defective material, the Local Public Agency may by contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any monies which may be due the Contractor, without prejudice to any other rights or remedies of the Local Public Agency.
- B. The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. (See Section 118 hereof.) All tests by the Local Public Agency will be performed in such manner as not to delay the work unnecessarily and will be made in accordance with the provisions of the Technical Specifications.
- C. The Contractor shall notify the Local Public Agency sufficiently in advance of backfilling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent of the Local Public Agency, the Contractor shall uncover for inspection and recover such facilities all at his own expense, when so requested by the Local Public Agency. Should it be considered necessary or advisable by the Local Public Agency at any time before final acceptance of the entire work to make an examination of work already completed by uncovering the same, the Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the Contractor or his subcontractors the Contractor shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, plus 15% of such costs to cover superintendence, general expenses and profit, shall be allowed the Contractor and he shall, in addition, if completion of the work of the entire Contract has been delayed thereby, be granted a suitable extension of time on account of the additional work involved.
- D. Inspection of materials and appurtenances to be incorporated in the Improvements embraced in this Contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the Technical Specifications, shall be final except as regards (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the Project Site.
- E. Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the Local Public Agency or its agents shall relieve the Contractor or his sureties of full responsibility for materials furnished or work performed not in strict accordance with the Contract.

126. REVIEW BY LOCAL PUBLIC AGENCY

The Local Public Agency, its authorized representatives and agents and the Representative for the Secretary shall at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however, that all instructions and approval with respect to the work will be given to the Contractor only by the Local Public Agency through its authorized representatives or agents.

127. FINAL INSPECTION

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

128. CORRECTION OF WORK

All work, all materials, whether incorporated in the work or not, all processes of manufacture, and all methods of construction shall be at all times and places subject to the inspection of the Design Engineer who shall be the final judge of the quality and suitability of the work, materials, processes of manufacture and methods of construction for the purposes for which they are used. Should they fail to meet his approval they shall be forthwith reconstructed, made good, replaced and/or corrected, as the case may be, by the Contractor, at his own expense. Rejected material shall

immediately be removed from the site. If, in the opinion of the Design Engineer and the Local Public Agency, it is undesirable to replace any defective or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the contract documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as in the judgment of the Local Public Agency shall be equitable. The Contractor shall be responsible for all costs associated with correction of work, including but not limited to police details, construction management/inspection, Traffic Engineering fees and materials testing.

129. INSURANCE

Unless otherwise stated in the request for proposals or elsewhere in the Contract Documents, Contractor shall maintain at least the following insurance limits:

- A. **Workmen's Compensation Insurance:** The Contractor shall provide adequate statutory WORKMEN'S COMPENSATION INSURANCE for all labor employed on the project who may come within the protection of such laws and shall provide, where practicable, Employers' General Liability insurance for the benefit of his employees not protected by such compensation laws, and proof of such insurance satisfactory to the Local Public Agency shall be given. Said insurance shall be written with such company as may be acceptable to the Local Public Agency and the policy shall be submitted to the Local Public Agency for examination. Satisfactory certificates of said insurance shall be filed with the Engineer for the Local Public Agency in QUADRUPPLICATE prior to the commencement of operations by the Contractor. The Contractor will be charged with the responsibility for proper and adequate Workmen's Compensation coverage for all his subcontract operations and in the event the Contractor's policy does not cover each and every subcontractor, certificates of insurance issued on policies by companies that may be acceptable to the Local Public Agency covering each and every subcontractor shall be filed with the Local Public Agency prior to the commencement of such subcontract operations.
- B. Contractor's Comprehensive General Public Liability and Property Damage Liability Insurances:
- (1) The Contractor shall carry Comprehensive General Liability insurance providing for a limit of not less than Five Hundred Thousand Dollars (\$500,000.00) for all damage arising out of bodily injuries to or death of one person, and subject to that limit for each person, a total limit of One Million Dollars (\$1,000,000.00) for all damages arising out of bodily injuries to or death of two or more persons in any one accident; and Contractor's Comprehensive Property Liability insurance providing for a limit of Five Hundred Thousand Dollars (\$500,000.00) for all damages arising out of injury to or destruction of property in any one accident, and subject to that limit per accident, a total (or aggregate) limit of One Million Dollars (\$1,000,000.00) for all damages arising out of injury to or destruction of property during the policy period.
 - (2) The insurance shall be placed with such company as may be acceptable to the Local Public Agency. The policy shall be submitted to the Local Public Agency through the Engineer for examination and satisfactory certificates of said insurance shall be filed with the Local Public Agency in QUADRUPPLICATE prior to the commencement of operations by the Contractor. The Contractor will be charged with the responsibility for similar Public Liability protection for all his subcontract operations, and in the event that the Contractor's policy does not cover each and every subcontractor, certificates of insurance issued on policies by companies that may be acceptable to the Local Public Agency covering each and every subcontractor shall be filed with the Engineer prior to the commencement of such contract operations.
 - (3) Insurance covering special hazards: Special hazards shall be covered by rider or riders to the Public Liability and Property Damage insurance policy or policies hereinabove required to be furnished by the Contractor or by separate policies of insurance. The Contractor shall require similar insurance in such amounts to be taken out and maintained by each subcontractor.
 - a. Property Damage Liability arising out of the collapse of or structural injury to any building or structure due to excavation (including borrowing, filling or backfilling in connection therewith), tunneling, pile driving, cofferdam work or caisson work; or to moving, shoring, underpinning, raising or demolition of any building or structure or removal or rebuilding or any structural support thereof.
 - b. Property Damage Liability for injury to or destruction of property arising, directly or indirectly, from blasting or explosions however caused, other than explosions of air or steam vessels, piping under pressure, prime movers, machinery or power transmitting equipment.
 - c. Property Damage Liability for injury to or destruction of wires, conduits, pipes, mains, sewers or other similar property, or any apparatus in connection therewith, below the surface of the ground arising from and during the use of mechanical equipment for the purpose of excavating or drilling within project limits; injury to or destruction of property at any time resulting therefrom.
 - (4) Indemnification Clause:
 - a. The Contractor will indemnify and hold harmless the Local Public Agency, and their agents and employees from and against all claims damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (a) is attributable to bodily injury,

sickness, disease, or death, or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom and (b) is caused in whole or in part by any negligent act or omission of the Contractor, and Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable regardless of whether or not it is caused in part by a party indemnified hereunder.

- b. In any and all claims against the Local Public Agency, or any of their agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or Indirectly employed by any of them or anyone for whose acts any of them may be held liable, the indemnification obligation under Paragraph 129 INSURANCE, Subparagraph b(4)A, shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under Workmen's Compensation Acts, disability benefit acts or other employee benefit acts.
 - c. The obligation of the Contractor under Paragraph 129 INSURANCE, Subparagraph b(4)A, shall not extend to the liability of the Local Public Agency, the their agents or employees arising out of (a) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications or (b) the giving of or the failure to give directions or instructions by the Local Public Agency, their agents or employees provided such giving or failure to give is the primary cause of injury or damage.
- C. Comprehensive Automobile Liability and Property Damage Insurance: The Contractor shall carry Comprehensive Automobile Liability insurance covering all owned vehicles, hired vehicles or non-owned vehicles in the amount of Five Hundred Thousand Dollars (\$500,000.00) for all damages arising out of bodily injuries to or death of one person and subject to that limit for each person, a total of One Million Dollars (\$1,000,000.00) for all damages arising out of bodily injuries to or death of two or more persons in any one accident and Property Damage coverage in the amount of Five Hundred Thousand Dollars (\$500,000.00) for all damages arising out of injury to or destruction of property.
- D. Owner's Protective Liability and Property Damage: The Contractor shall provide the Local Public Agency through the Engineer an insurance policy written in the name of the Local Public Agency and extended to include the interests of the Local Public Agency and protect the Local Public Agency from any liability which might be incurred against them as a result of any operation of the Contractor or his subcontractors or their employees. Such insurance shall provide for a limit of not less than Five Hundred Thousand Dollars (\$500,000.00) for all damages arising out of bodily injuries to or death of one person, and subject to that limit for each person, a total limit of One Million Dollars (\$1,000,000.00) for all damages arising out of bodily injuries to or death of two or more persons in any one accident; and not less than Five Hundred Thousand Dollars (\$500,000.00) for all damages arising out of injury to or destruction of property in any one accident and subject to that limit per accident, a total (or aggregate) limit of not less than One Million Dollars (\$1,000,000.00) for all damages arising out of injury to or destruction of property during the policy period.
- E. Other Data: In the event the form of any policy or certificate or the amount of the insurance of the companies writing same are not satisfactory to the Local Public Agency and the Engineer, the Contractor shall secure other policies or certificates in form and amount and with companies satisfactory to the Local Public Agency. **The Contractor shall not cause policies to be canceled or permit them to lapse and all insurance policies shall include a clause to the effect that the policy shall not be subject to cancellation or a reduction in the required limits of liability or amount of insurance until notice has been sent by registered mail to the Local Public Agency and Engineer stating when, not less than ten (10) days thereafter, such cancellation or reduction shall be effective.** All certificates of insurance shall contain true transcripts from the policy, authenticated by the proper officer of the insurer evidencing in particular those insured, the extent of the insurer, the location and operations to which the insurance applies, the expiration date and the above-mentioned notice of cancellation clause. All policies and certificates in QUADRUPLICATE by approved successful bidder shall be delivered to the Local Public Agency through the Engineer before any preparation of the construction contracts.

If any part of the work is sublet, similar insurance shall be provided by and on behalf of the subcontractors to cover their operations and in the event that the Contractor's policy does not cover each and every subcontractor, certificates of insurance issued on Policies by companies that may be acceptable to the Local Public Agency covering each and every subcontractor shall be filed with the Engineer prior to the preparation of any construction contracts and prior to the commencement of contract operations.

All the insurance specified in this contract shall be provided at no additional expense to the Local Public Agency.

- F. The Contractor shall be responsible for the proper and adequate insurance coverage for all his subcontract operations. It is his responsibility to receive certificates covering all subcontract operations from his subcontractors before such operations are begun. Failure to comply with this provision shall render the Contractor liable for any loss incurred.

130. PATENTS

The Contractor shall hold and save the Local Public Agency, its officers and employees, harmless from liability of any nature or kind, including costs and expenses, for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the Local Public Agency, unless otherwise specifically stipulated in the Technical Specifications.

131. WARRANTY OF TITLE

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

132. GENERAL GUARANTY

Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of the Improvements embraced in this Contract by the Local Public Agency or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of 24 months from the date of final acceptance of the work. Final acceptance shall be defined as the date in which all outstanding punch list items are completed and when all work items identified during the final inspection are completed The Local Public Agency will give notice of defective materials and work with reasonable promptness.

133. REPRESENTATIONS OF CONTRACTOR

The Contractor represents and warrants:

- A. That he is financially solvent and that he is experienced and competent to perform the type of work or furnish the plant, material, supplies, or equipment to be performed or furnished by him; and
- B. That he is familiar with all Federal, State, municipal and department laws, ordinances, orders and regulations which may in any way effect the work of those employed therein, including but not limited to any special, acts relating to the work or to the project of which it is a part; and
- C. That such temporary and permanent work required by the contract documents to be done by him can be satisfactorily constructed and used for the purpose for which it is intended, and that such construction will not injure any person or damage any property; and
- D. That he has carefully examined the drawings, specifications and addendum (or addenda), if any, and the site of the work, and that from his own investigation he has satisfied himself as to the nature and location of the work, the character, quality and quantity of surface and subsurface materials likely to be encountered, the character of equipment and other facilities needed for the performance of the work, the general and local conditions, and all other materials which may in any way affect the work or its performance.

134. WEATHER CONDITIONS

In the event of temporary suspension of work, or during inclement weather, or whenever the Engineer shall direct, the Contractor shall, and shall cause his subcontractors to protect carefully his and their work and materials against damage or injury from the weather at no additional cost to the Local Public Agency. If, in the opinion of the Engineer, any work or material shall have been damaged or injured by reason of failure on the part of the Contractor or any of his subcontractors so to protect his work, or otherwise damaged by the negligence of the Contractor, subcontractors or their agents or servants, or is otherwise defective, such materials shall be removed and replaced at the expense of the Contractor. Special attention shall be given to the winter shutdown period. All temporary patching to make the roads passable or to keep driveways open and safe, shall be done at no additional cost to the DEPARTMENT of PUBLIC WORKS.

135. QUANTITIES OF ESTIMATE

Wherever the estimated quantities of work to be done and materials to be furnished under this contract are shown in any of the documents including the bid (proposal), they are given for use in comparing bids and the right is especially reserved by the Local Public Agency to increase or diminish them as may be deemed reasonably necessary or desirable by the Local Public Agency, and such increase or diminution shall in no way vitiate claims or liability for damages except as provided for in Section 109 hereof.

136. [RESERVED]

137. PAYMENTS BY CONTRACTOR

The Contractor shall pay (a) for all transportation and utility services not later than the 20th day of the calendar month following that in which services are rendered, (b) for all materials, tools and other expendable equipment to the extent of 90 percent of the cost thereof, not later than the 20th day of the calendar month following that in which such materials, tools and equipment are delivered at the site of the project, and the balance of the cost thereof not later than the 30th day following the completion of that part of the work in or on which such materials, tools and equipment are incorporated or used, and (c) to each of his subcontractors, not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor on account of the work performed by his subcontractors to the extent of such subcontractors interest therein.

138. NOTICE AND SERVICE THEREOF

- A. The service of any notice, letter or other communication shall be deemed to have been made to one of the contracting parties on the other party to the contract when such letter, notice or other communication has been delivered to the legal office address of the addressee, by a duly authorized representative of the address or in person, or when such notice, letter or other communication has been deposited in any regularly maintained mailbox of the United States Postal Service in a properly addressed, postpaid wrapper. The date of such service shall be considered to be the date of such personal delivery or mailing.
- B. The address of the Contractor noted in his bid (proposal) and/or the address of his field office on or near the site of the work hereunder shall be considered as his legal address for the purposes as above set forth.

139. PROVISIONS REQUIRED BY LAW DEEMED INSERTED

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion or correction.

140. LIENS

Neither the final payment nor any part of the retained percentage shall become due until the Contractor delivers to the Local Public Agency a complete release of all liens arising out of this contract, or receipts in full in lieu thereof, and an affidavit that so far as he has knowledge or information the releases and receipts include all the labor and material for which a lien could be filed, but the Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Local Public Agency to indemnify him against any liens. If any liens remain unsatisfied after all payments are made, the Contractor shall refund to the Local Public Agency all monies that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

THE LOCAL PUBLIC AGENCY, PRIOR TO MAKING EACH PAYMENT TO THE CONTRACTOR, may require the Contractor to furnish releases or receipts from any or all persons / firms performing work and supplying material or services to the Contractor, or any subcontractor, if deemed necessary to protect its interest.

141. CONTRACTOR'S OBLIGATIONS

- A. The Contractor shall and will in good workmanlike manner, do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this contract, within the time herein specified, in accordance with the provisions of this contract and said specifications and in accordance with the plans and drawings covered by this contract and any and all supplemental plans and drawings, and in accordance with the directions of the Engineer as given from time to time during the progress of the work as may be required. He alone shall be responsible for the safety, efficiency and adequacy of his plant, appliances and methods and for any damage which may result from their failure or their improper construction, maintenance or operation. The Contractor shall observe, comply with and be subject to all terms, conditions, requirements and limitations of

the contract specifications, and shall do, carry on, and complete the entire work to the satisfaction of the Engineer and the Local Public Agency.

- B. The Contractor shall be solely responsible for all the work and shall provide all precautionary measures necessary for preventing injury to persons or damage to property. All injury or damage of whatever nature resulting from the work or resulting to persons, property or the work during its progress, from whatever cause, shall be the responsibility of and shall be borne and sustained by the Contractor. The Contractor shall hold the Engineer, the Local Public Agency or their agents harmless and defend and indemnify the Engineer and the Local Public Agency or their agents against damages or claims for damages due to injuries to persons or to property arising out of the execution of the work and for damages to materials furnished for the work, infringement of inventions, patents and patent rights used in doing the work, or damages arising out of the use of any improper materials, equipment, or labor used in the work, and for any act, omission or neglect of the Contractor, his agents, employees and his subcontractors therein. He shall bear all losses resulting to him including but not limited to losses sustained on account of character, quality or quantity of any part or all of the work, or because the nature of the land in or on which the work done being different from what was estimated or indicated, or on account of the weather, elements or other causes.

142. ENGINEER'S AUTHORITY

The Engineer shall give all orders and directions contemplated under this contract and specifications relative to the execution of the work. The Engineer shall determine the amount, quality, acceptability and fitness of the several kinds of work and materials which are to be paid for under this contract and shall decide all questions which may arise in relation to said work and construction thereof. The Engineer's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said contract or specifications, the determination or decision of the Engineer shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question. The Engineer shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found obscure or be in dispute. Any differences or conflicts in regard to their work which may arise between the Contractor under this contract and other contractors performing work for the + Local Public Agency shall be adjusted and determined by the Engineer.

143. ALL WORK SUBJECT TO CONTROL BY ENGINEER

- A. In the performance of the work, the Contractor shall abide by all orders, directions and requirements of the Engineer or his designee, and shall perform all work to the satisfaction of the Engineer, and at such time and places, by such methods and in such manner and sequence as he may require. The Engineer shall determine the amount, quality, acceptability and fitness of all parts of the work. The Engineer shall interpret the drawings, specifications, contract, all other documents and the extra work orders. The Engineer shall also decide all other questions in connection with the work. The Contractor shall employ no plant, equipment, materials, methods or men to which the Engineer objects and shall remove no plant, materials, equipment or other facilities from the site of the work without the Engineer's permission. Upon request, the Engineer will confirm in writing any oral order, direction, requirement or determination.
- B. Inspectors shall be authorized to inspect all work done and material furnished. Such inspection may extend to all or any part of the work, and to the preparation or manufacture of the materials to be used. The presence or absence of an inspector shall not relieve the Contractor from any requirements of the Contract. In case of any dispute arising between the Contractor and the Inspector as to materials furnished or the manner of performing the work, the inspector shall have the authority to reject material or suspend the work until the question at issue can be referred to and decided by the Engineer. The Inspector shall not be authorized to revoke, alter, enlarge, relax or release any requirement of these specifications, nor to approve or accept any portion of the work, nor to issue instructions contrary to the drawings and specifications. The Inspector shall in no case act as foreman or perform other duties for the Contractor, or interfere with the management of the work by the latter. Any advice which the inspector may give the Contractor shall in nowise be construed as binding the Local Public Agency or the Engineer in any way nor releasing the Contractor from the fulfillment of the terms of the contract.

144. INTERPRETATION OF DRAWINGS AND SPECIFICATIONS

- A. Except the Contractor's executed set, all drawings and specifications are the property of the Local Public Agency. The Local Public Agency will furnish the Contractor without charge three (3) sets of the drawings and specifications. Additional sets will be furnished upon request at a cost as determined by the Local Public Agency. Such drawings and specifications are not to be used on other work and those sets in usable condition shall be returned to the Local Public Agency upon request at the completion or cessation of the work or termination of the contract.
- B. The Contractor shall keep at the site of the work one copy of the drawings and specifications, and shall at all times give the Local Public Agency and the Engineer and their representatives access thereto. Anything shown on the drawings and not mentioned in the specifications, or mentioned in the specifications and not shown on the

drawings, shall have the same effect as if shown or mentioned in both. In case of any conflict or inconsistency between the drawings and specifications, the specifications shall take precedence. Any discrepancy in the figures and the drawings shall be immediately submitted by the Contractor to the Engineer for decision and the decision thereon by the Engineer shall be final. In case of differences between small and large scale drawings, the larger scale drawings shall take precedence.

145. ENGINEER'S CONTROL NOT LIMITED

The enumeration in this contract of particular instances in which the opinion, judgment, discretion or determination of the Engineer shall control or in which work shall be performed to his satisfaction or subject to his approval or inspection, shall not imply that only matters similar to those enumerated shall be so governed and performed, but without exception all the work shall be so governed and performed.

146. CONTRACT AND CONTRACT DOCUMENTS

The Drawings, the Specifications and Addendum (or Addenda), the Advertisement, the Information for and Notice To Bidders, and the Bid (Proposal) as accepted by the Owner as evidenced by the City's Notice to Award to the Contractor, which Notice is made a part of this Contract. Special Provisions, and the General Provisions shall form a part of this Contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The table of contents, titles, headings, running headlines and marginal references to various provisions of the Contract Documents are in no way to affect, limit or cast light on the interpretation of the provisions to which they refer. Whenever the term "Contract Documents" is used, it shall mean and include this Contract, the enumerated Drawings, Special Provisions, General Provisions, the Technical Specifications, the Advertisement, the enumerated Addendum (or Addenda), Information for Bidders, the Bid (Proposal) as accepted by the City. The City shall interpret his own requirements. In case of any conflict or inconsistency between the provisions or this signed portion of the Contract and those of the Specifications, the provisions of this signed portion of the Contract shall govern.

147. DRAWINGS:

Drawings are contained in Appendix D entitled "Scope of Work".

148. COOPERATION WITH UTILITIES

The Contractor shall arrange and cooperate with the various utility corporations or other parties interested in connection with the relocation and maintenance of all public fixtures when necessary and appurtenances or service connections within or adjacent to the limits of construction, as directed by the Engineer.

The Contractor will be responsible for any damage done to any utility poles or lines, curbing, basins, hydrants, water and sewer lines, conduits and other accessories and appurtenances of a similar nature which are fixed or controlled by the City Public Utility Company or Corporation. He shall perform any carry out his work in such a manner as not to interfere with or damage fixtures mentioned herein, or as shown on the Plans or discovered during construction.

149. MAINTENANCE OF FIRE LANES

Fire lanes designated by the Bureau of Police and Fire must be accessible at all times for firefighting equipment, other emergency apparatus and traffic crossing.

150. "OR APPROVED EQUAL" CLAUSE

Whenever a material or article required is specified or shown on the Drawings by using the name of the proprietary product or of a particular manufacturer or vendor, any material or article which will perform adequately the duties imposed by the general design will be considered equal and satisfactory providing the material or article so proposed is of equal substance and function in the Engineer's and City's opinion. It shall not be purchased or installed without the Owner's written approval. In all cases new material shall be used on the project.

151. REPORTS, RECORDS AND DATA

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

152. CONFLICTING CONDITIONS

Any and all terms or provisions in conflict with or inconsistent with the U.S. EDA Contracting Provisions for Construction Projects ("EDA Provisions") shall be subject to said controlling EDA Provisions. In case the EDA Provisions are silent as to any particular issue resulting from further conflicting or inconsistent provisions, the General Contract Provisions contained in Appendix J shall control.

153. 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:

- A. Williams-Steiger Occupational Safety and Health Act of 1970, Public Law 91-596;
- B. Part 1910 - Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations;
- C. Part 1518 - Safety and Health Regulations for Construction, Chapter XIII of Title 29, Code of Federal Regulations.

154. PROTECTION OF LIVES AND HEALTH

In order to protect the lives and health of his employees under the Contract, the Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by the Associated General Contractors of America, Incorporated, and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under this Contract.

The Contractor alone shall be responsible for the safety, efficiency and adequacy of his plant, appliances and methods., and for any damage which may result from their failure or their improper construction, maintenance or operation.

The Contractor shall be solely responsible for the acts and omissions of his agents, employees and his subcontractors and their agents and employees and shall hold the Engineers and the Owner harmless and defend the injuries to others or property of others which result from said acts or omissions.

155. CONTRACTOR TO LAY OUT HIS OWN WORK

The City will establish such general reference points as in its judgement will enable the Contractor to proceed with the work. The Contractor, at his own expense, shall provide all materials and equipment and such qualified helpers as the City may require for setting the general reference points and shall protect and preserve all stakes, benches and other markers used to identify the reference points. The Contractor shall lay out all the contract work from the above and shall be responsible for the accuracy of all lines, grades and measurements, conforming to the American's with Disabilities Act. In the event the general reference points established by the City are subsequently damaged or destroyed by the Contractor, the reference points will be reestablished by the City at the Contractor's expense.

156. SUBSURFACE DATA

The Contractor shall be aware that some buildings in the City have basements and/or utility vaults under the sidewalks. The Contractor shall be solely responsible to verify the presence of building/utility vaults and use extreme care when working within or adjacent to sidewalks in front of buildings that may contain vaults. Any basement or utility vaults damaged by the Contractor while carrying out this Contract shall be repaired by the Contractor to the satisfaction of the Engineer at no additional charge to the City. The Contractor is solely responsible for the investigation of subsurface basement vaults.

Pavement cores have been obtained by the Design Engineer. The core logs are included in the Contract Documents with their locations shown on the plans.

SPECIAL CONDITIONS CONSTRUCTION SERVICES FOR CHARLOTTE HOPE PLAZA PROJECT

P R O V I D E N C E , R H O D E I S L A N D

401. PROJECT AREA

The Project Area for **CONSTRUCTION SERVICES FOR CHARLOTTE HOPE PLAZA PROJECT** is within the City of Providence, County of Providence, State of Rhode Island.

402. TIME FOR COMPLETION

The work which the Contractor is required to perform under this Contract shall be commenced at the time stipulated by the Local Public Agency in the Notice to Proceed to the Contractor and shall be fully completed, including all punchlist items by **December 4, 2020**.

403. LIQUIDATED DAMAGES

Liquidated damages shall be as set forth in the General Contract Provisions in Appendix J to the Request for Proposals.

404. RESPONSIBILITIES OF CONTRACTOR

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

405. COMMUNICATIONS

- A. All notices, demands, requests, instructions, approvals, proposals, and claims must be in writing.
- B. Any notice to or demand upon the Contractor shall be sufficiently given if delivered at the office of the Contractor stated on the signature page of the Agreement (or at such other office as the Contractor may from time to time designate in writing to the **Local Public Agency**), or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to such office.
- C. All papers required to be delivered to the **Local Public Agency** shall unless otherwise specified in writing to the Contractor, be delivered to the **Providence Redevelopment Agency**, 444 Westminster Street, Suite 3A, Providence, Rhode Island 02903, and any notice to or demand upon the Local Public Agency shall be sufficiently given if so delivered, or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission to said Local Public Agency at such address, or to such other representatives of the Local Public Agency or to such other address as the Local Public Agency may subsequently specify in writing to the Contractor for such purpose.
- D. Any such notice shall be deemed to have been given as of the time of actual delivery or (in the case of mailing) when the same should have been received in due course of post, or in the case of telegrams, at the time of actual receipt, as the case may be.

406. [RESERVED]

407. JOB OFFICES

- A. The Contractor shall furnish and maintain during construction of the improvements embraced in this Contract, adequate facilities on the Project Area or adjacent thereto, for the use of the Local Public Agency and its Engineers, as follows:
1. The Contractor shall provide a suitable, weather tight building or trailer for a field office in a location in the vicinity of the project for use of the field engineering staff. The building or trailer shall be approximately 400 square feet in area and a suitable inside height. The Contractor shall install windows to provide sufficient light. The doors required to be locked shall be equipped with cylinder locks. The office shall be provided within 30 days after the award of the contract.
 2. The field office shall be divided into at least two rooms as directed by the Local Public Agency.
 3. Telephone service shall be provided in the principal office. The Local Public Agency and his representatives shall be allowed the use of the telephone for purposes relating to the project throughout the duration of the Contract without cost to the Engineer or the Local Public Agency. Artificial light, heat during cold weather maintained at a minimum temperature of 70 degrees F., screens, cabinets, shelves, lockers, tables, racks, chairs, storage compartments and any other items required to completely equip each office and room for the intended purpose shall be furnished.
 4. Toilet facilities are to include one bowl, one urinal and two washstands; all suitably enclosed and connected into the City water and sanitary systems and approved by the Local Public Agency and the City of Providence Water and Sanitary Departments, shall be provided.
 5. The cabinets and lockers shall be provided with locks. The furniture mentioned above or any other furniture or facilities required for each particular office and room, shall be furnished by the Contractor regardless of whether or not it is specified.
 6. The Contractor shall confer with the Local Public Agency and submit for approval, the proposed field office to be provided hereunder, before proceeding with the layout of the field office. A building constructed by the Contractor shall be of wood frame or acceptable equal, with walls, roof and ground floor insulated. As an alternate, the Contractor may supply field office trailers or trailers, providing substantially equivalent space and facilities.
 7. The field office shall be maintained by the Contractor for the duration of the construction period of the contract and for such additional time as may be required by the engineering force for a further period of time not exceeding 60 consecutive days thereafter, as may be required by the Local Public Agency. Such maintenance should include general watchman service during all periods work is not in progress at the site. The field office and all the furnishing and equipment shall then be the property of the Contractor. In case of a field office under rental by the Contractor, he shall be relieved of any further costs of rental, heating, lighting, telephone, service and maintenance.
 8. The cost of providing, furnishing and maintaining the field office together with all the facilities will not be paid for separately but shall be included in the price bid for the work under the Contract.
 9. The field office and furnishings will become the property of the Contractor and it shall be his responsibility to remove them from the site, clear and make the premises neat and presentable so the site will match the surrounding area.
 10. If the Contractor fails or neglects to provide all the specified items or work within the time specified, the Local Public Agency may purchase or secure the missing items or have work accomplished and the cost thereof shall be deducted from any money then or thereafter due the Contractor.
 11. In addition to the requirements for the Field Office specified above, the Contractor will be required to provide for the use of the Engineer the following: (a) An indoor-outdoor thermometer; (b) An air conditioner capable of maintaining a temperature of 72 F in the summertime; (c) A printing calculator capable of performing addition, subtraction, multiplication and division.
 12. The Contractor and his subcontractors may maintain such office and storage facilities on the site as are necessary for the proper conduct of the work. These shall be located so as to cause no interference to any work to be performed on the site. The Local Public Agency shall be consulted with regard to locations.
 13. Upon completion of the Improvements, or as directed by the Local Public Agency the Contractor shall remove all such temporary structures and facilities from the site, some to become his property, and leave the entire site of the work in the condition required by the Contract.

408. PARTIAL USE OF SITE IMPROVEMENTS

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

- A. The use of such sections of the improvements shall in no way impede the completion of the remainder of the work by the Contractor.
- B. The Contractor shall not be responsible for any damages or maintenance costs due directly to the use of such sections.

- C. The use of such sections shall in no way relieve the Contractor of his liability due to having used defective materials or to poor workmanship.
- D. The period of guarantee stipulated under GENERAL CONDITIONS, SECTION 132, shall not begin to run until the date of the final acceptance of all work which the Contractor is required to construct under this Contract.

409. WORK BY OTHERS

The Contractor will consult and cooperate with the utility companies to permit their work to proceed coincidentally with the work under this contract so as not to delay Completion of the project.

410. CONTRACT DOCUMENTS AND DRAWINGS

The Local Public Agency will furnish the Contractor with an electronic storage device containing the Contract Documents, Plans, Drawings and Addenda without charge.

411. DISPOSAL OF SALVAGED MATERIALS

- A. All salvaged material such as granite curbing; manhole frames and covers; catch basin frames, grates, covers and traps; etc., not required to be installed in the work shall be removed and transported to the City of Providence, Department of Public Works storage yards located in the vicinity of 700 Allens Avenue, Providence, Rhode Island.
- B. All salvaged materials that are part of the existing water distribution system of the City of Providence Water Supply Board shall be removed and transported to the Water Supply Board Headquarters which are located at 552 Academy Avenue, Providence, Rhode Island.
- C. The above work shall be accomplished at no additional expense to the Local Public Agency, but the cost of the work shall be included in the submitted unit price for the applicable items of work.

The Contractor shall be responsible for arranging salvaged materials delivery and obtaining signed receipt(s) from responsible personnel at the above agencies listing material types and quantities salvaged and delivered. Copies of receipt(s) shall be provided said agencies and the Local Public Agency on the date of delivery.

412. AS-BUILT DRAWINGS

- A. The Contractor shall provide for the obtaining and recording of "as built" information as prescribed herein. No separate payment will be made for this work, but compensation, therefore, shall be considered as having been included in the prices stipulated for the appropriate items of work as listed in the Bid.
- B. The Contractor shall set aside a complete set of drawings expressly for the recording of "As-Built" information in the field. Required information shall be obtained and recorded daily by the Contractor.
- C. Once each month the Contractor shall transfer the "As-Built" information from the field prints to reproducible transparencies supplied by the Local Public Agency and two copies thereof shall be submitted with the monthly requisition for payment. These monthly submissions shall be certified each month by a Professional Engineer or Land Surveyor registered in the State of Rhode Island as to their accuracy and completeness.
- D. Payment requisitions will not be considered for approval unless complete "As-Built" information is submitted as required above.
- E. Minimum "As-Built" information shall be provided for the work as herein indicated, including but not limited to: (Requirements to be provided by agency prior to commencement of work).
- F. At the completion of the work and as a requirement precedent to the final payment, the Contractor shall submit to the Local Public Agency the set of reproducible transparencies upon which the "As-Built" information has been recorded and upon which has been affixed a certificate bearing the signature and registration seal of a Professional Engineer, registered in the State of Rhode Island, hired by or in the employ of the Contractor, attesting to the accuracy and completeness of the "As-Built" drawings.

413. PROVISION FOR FLOW OF PRESENT DRAINAGE

Provision for the flow of all sewers, drains and watercourses that are met or altered during construction shall be provided by the Contractor and all the connections shall be restored without extra charge. All offensive matter shall be removed immediately with such precautions as may be directed. If required, the Contractor shall install temporary bypass connections for surface or pipe drainage facilities to provide uninterrupted or continuous service during the work of construction.

414. WORK TO BE ACCOMPLISHED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS

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

415. CONTRACTOR TO CHECK DIMENSIONS AND SCHEDULES

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

416. PROTECTION OF TREES

The Contractor shall take special care to preserve and protect from injury all trees and other plant material to remain along the lines of construction. No such trees or plant material shall be removed or cut down, trimmed or otherwise cut without permission from the Engineer. Failure to comply may result in a fine by the City Forester.

417. REMOVAL OF WATER AND PROTECTION FROM FLOODING

The Contractor shall construct and maintain, at no additional expense to the Local Public Agency, all pumps, drains, well points or any other facility for the control and collection of groundwater and/or surface water and provide all pumps and piping for the removal of water from the trenches and excavations so that all trenches and excavations may be kept, at all times, free from water and so that all construction work may be performed in the dry. Any damage resulting from the failure of the dewatering operations of the Contractor and any damage resulting from the failure of the Contractor to maintain the areas of all work in a suitable dry condition, shall be repaired by the Contractor as directed by the Engineer, at no additional expense to the Local Public Agency. The Contractor's pumping and dewatering operations shall be carried out in such a manner as to prevent damage to existing structures and utilities and the contract work, and so that no loss of ground will result from these operations. Precautions shall be taken to protect new and existing work from flooding during storms or from other causes. Pumping shall be continuous where directed by the Engineer, to protect the work and/or maintain satisfactory progress. All pipe lines or structures not stable against uplift during construction or prior to completion shall be thoroughly braced or otherwise protected. Water from the trenches, excavations and drainage operations shall be disposed of in such a manner as will neither cause public nuisance, nor cause injury to public health nor to public or private property nor to the work completed, nor to the work in progress. No extra payment will be made for the removal of water, protection from flooding, drainage work, diversion of existing water courses and such other work; but, compensation therefor shall be considered as having been included in the prices stipulated for the appropriate items of work as listed in the Bid.

418. HURRICANE PROTECTION

Should hurricane warnings be issued, the Contractor shall take every practicable precaution to minimize danger to persons, to the work and to adjacent property. These precautions shall include closing all openings, removing all loose materials, tools and/or equipment from exposed locations, and removing or securing scaffolding and other temporary work.

419. FIRST-AID TO INJURED

The Contractor shall keep in his office, ready for immediate use, all articles necessary for giving first aid to injured employees. He shall also provide arrangements for the immediate removal and hospital treatment of any employee injured on the work who may require the same.

420. CONFORMANCE WITH DIRECTIONS

The Design Engineer may make alterations in the line, 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 and the work that may thus be dispensed with. If they increase the quantity included in any such item, such increase shall be paid for at the stipulated price, but no such alteration shall increase shall be paid for at the stipulated price, but no such alteration shall be made without the consent of the City of Providence.

421. PROTECTION AGAINST HIGH WATER AND STORM

- A. The Contractor shall take all precautions to prevent damage to the work or equipment by high waters or by storms. The Engineer may prohibit the carrying out of any work at any time when, in his judgment, high waters or storm conditions are unfavorable or not suitable, or at any time, regardless of the weather, when proper precautions are not being taken to safeguard previously constructed work or work in progress.
- B. In case of damage caused by the failure of the Contractor to take adequate precautions, the Contractor shall repair or replace equipment damaged and shall make such repairs or rebuild such parts of the damaged work, as the Engineer may require, at no additional expense to the Local Public Agency.

422. SEQUENCE OF WORK

The Contractor shall be required to prosecute his work in accordance with a schedule prepared by him in advance in accordance with additional requirements specified herein and approved by the Engineer. This schedule shall state the methods and shall forecast the times for doing each portion of the work. Before beginning any portion of the work, the Contractor shall give the Engineer advance notice and ample time for making the necessary preparations.

The City reserves the right to select certain roads to be constructed at the onset of construction.

423. 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, and whenever the Engineer shall notify the Contractor in writing that any person employed on the project is, in his opinion, incompetent, unfaithful, disorderly, or otherwise unsatisfactory, or not employed in accordance with 'the provisions of this contract, such person shall be discharged from the project and shall not be again employed on it.

424. STREETS AND SIDEWALKS TO BE KEPT OPEN

- A. The Contractor shall at all times keep the streets, highways, roads, private walks and sidewalks in which he may be at work, open for pedestrian and vehicular traffic at his own expense, unless otherwise authorized by the Engineer in writing. If, in the opinion of the Engineer, the interest of abutters and public requires it, the Contractor shall bridge or construct plank crossings over the trenches at street crossings, roads, or private ways, or provide such temporary means of crossing and guarding as shall be acceptable to the Engineer. The Contractor shall conduct his work for this objective in such manner as the Engineer may direct from time to time. No sidewalk shall be obstructed where it is possible to avoid it. The closing of any traffic lanes shall be done only with the approval of the Providence Traffic Engineering Department.
- B. The Contractor shall provide at his own expense, all necessary fire crossings at principal intersections or ways usually traveled by fire apparatus.

425. LIGHTS, BARRIERS, WATCHMEN AND INDEMNITY

- A. The Contractor shall put up and maintain such barriers, lighting and warning lights, danger warning signals and signs that will prevent accidents during the construction work and protect the work and insure the safety of personnel and the public at all times and places, and the Contractor shall indemnify and protect the Local Public Agency and the Engineer 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.
- B. In addition to the above, when and as needed, or when required by the Engineer, the Contractor shall post signs and employ watchmen for excluding at all times unauthorized persons from the work, for which the Contractor will not be paid additional compensation.
- C. The Contractor shall be responsible for excluding at all times from lands within easement areas, all persons not directly connected with the work or authorized by the Local Public Agency to be in the work areas.

426. TRAFFIC CONTROL

- A. Approval of any street closure, lane closure, sidewalk closure or detour must be coordinated with City of Providence Traffic Engineer before it is put into operation. All proper Traffic Engineering permits must be approved prior to work starting.
- B. The Contractor shall make himself aware of all City regulations governing construction, and their effect on vehicular and pedestrian traffic.
- C. Whenever necessary, or whenever directed by the Engineer, the Contractor shall employ traffic control devices to insure a safe, orderly routing of traffic around or across the work. No separate payment shall be made for this work, but compensation, therefore, shall be considered as having been included in the prices stipulated for the appropriate items of work as listed in the bid.
- D. Where deemed necessary by the Engineer, supplementary traffic control shall be provided by off-duty, City of Providence Police Officers.
- E. The Contractor shall request for use of off-duty, City of Providence Police Officers for supplementary traffic control in accordance with the unit price for this work submitted as part of the Bid. Invoices shall be billed directly to the Providence Redevelopment Agency. Police details and supplementary traffic control flagpersons MUST be coordinated and approved by the City's Design Engineer.
- F. The Contractor shall be solely responsible for the safe passage of traffic and shall indemnify and protect the Local Public Agency and the Design Engineer 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.

427. NIGHT WORK

- A. Night work, or work on Saturdays, Sundays and legal holidays may be required in order to perform certain construction operations without causing excessive interference with or disruption of traffic flow, water service, etc.
- B. All water work operations requiring the closing or shutdown of existing water service facilities will be conducted at those times as directed by the Engineer that will minimize the interference with, or disruption of service.
- C. All trenching, pipe laying, paving operations, etc., shall be conducted at times as directed by the Engineer that will minimize the interference with normal and emergency vehicular traffic flow.
- D. No work shall be scheduled by the Contractor on nights, Saturdays, Sundays or legal holidays unless directed or approved by the Director of Public Works. The Contractor will receive no extra payment for work at these times and compensation shall be considered as having been included in the prices stipulated for the appropriate items of work as listed in the Proposal.
- E. All necessary lighting, safety precautions, and other requirements for night, Saturday, Sunday and holiday work shall be provided at no extra cost to the Local Public Agency.

428. BUS LINE INTERFERENCE

Whenever it may be necessary to interfere with any bus lines, notice shall be given to the corporation owning the same, and reasonable time shall be given to said corporation to arrange the schedule for operation of same, as may be necessary.

429. WORK IN COLD WEATHER

- A. The Engineer will 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. In general, work shall be prosecuted throughout the year and the Contractor will be expected to keep work going and employment of labor as continuous as possible.

- B. All methods and materials used 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. The Contractor will receive no extra payment or 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.
- C. In the event of temporary suspension of work, or during inclement weather, or whenever the Engineer shall direct, the Contractor will, and will cause his subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If in the opinion of the Engineer, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his subcontractors to so protect his work, such materials shall be removed and replaced at the expense of the Contractor.
- D. In the event that the project is shut down during the winter months, the Contractor will be required to install, maintain and remove such temporary materials as may be required to protect completed work and to provide safe vehicular and pedestrian access. No separate payment shall be made to the Contractor for such temporary materials and labor.

430. BLASTING AND EXPLOSIVES

- A. Blasting or use of explosives will not be permitted on this project.
- B. Rock, boulders, ledge, concrete foundations, etc., shall be removed by the use of pneumatic tools; drilling and splitting mechanically or by hand; or by other means not requiring the use of explosives.

431. [RESERVED]

432. RESERVED MATERIALS

- A. Materials found on the work suitable for any special use shall be reserved for that purpose without charge to the Local Public Agency.
- B. Where permitted, the Contractor may use in the various parts of the work, without charge to the local public agency, therefore, any materials taken from the excavations.

433. DISPOSAL OF MATERIALS. ACCESS TO HYDRANTS AND GATES AND MATERIALS TRIMMED- UP FOR CONVENIENCE OF PUBLIC TRAVEL OR ADJOINING TENANTS

The materials from the trench and excavations and those used in the construction of the work shall be deposited in such a manner so they will not endanger persons or the work, and so that free access may be had at any time to all hydrants and gates in the vicinity of the work. The materials shall be kept trimmed-up so as to be of as little inconvenience as possible to the public travel or the adjoining tenants. All excavated materials not approved for backfill and fill, all surplus material and all rock resulting from the excavations shall be removed and satisfactorily disposed of off the site by the Contractor at no additional expense to the Local Public Agency.

434. LENGTH OF TRENCH TO BE OPENED, MAINTAINING PREMISES FREE FROM OBSTRUCTIONS, CROSSOVERS, DIRECTIONAL SIGNS AND LIGHTS

- A. The length of trench opened at any time from point where ground is being broken to completed backfill and also the amount of space in streets or public and private lands occupied by equipment, trench and supplies, shall not exceed the length or space considered reasonably necessary and expedient by the Engineer. In determining the length of open trench or spaces for equipment, materials, supplies and other necessities, the Engineer will consider the nature of the construction and equipment being used, inconvenience to the public or to private parties, possible dangers and other proper matters. All work must be constructed with a minimum of inconvenience and danger to the public and all other parties concerned.
- B. Whenever any trench obstructs pedestrian and vehicular traffic in or to any, public street, private driveway or property entrance, or on private property, the Contractor shall take such means as may

be necessary to maintain pedestrian and vehicular traffic and access. Until such time as the work may have attained sufficient strength to support backfill, or if for any other reason it is not expedient to backfill the trench immediately the Contractor shall construct and maintain suitable plank crossings and bridges to carry essential traffic in or to the street, driveway or property in question as specified or directed.

- C. Suitable signs, lights and such required items to direct traffic shall be furnished and maintained by the Contractor.
- D. The Contractor must keep streets and premises free from unnecessary obstructions, debris and all other materials. The Engineer may, at any time, order all equipment, materials, surplus from excavations, debris and all other materials lying outside that length of working space promptly removed and should the Contractor fail to remove such material within 24 hours after notice to remove the same, the Engineer may cause any part or all of such materials to be removed by such persons as he may employ, at the Contractor under the contract. In special cases, where public safety urgently demands it, the Engineer may cause such materials to be removed without prior notice.

435. INTERFERENCE WITH EXISTING STRUCTURES

- A. Whenever it may be necessary to cross or interfere with existing culverts, drains, sewers, water pipes or fixtures, guardrails, fences, gas pipes or fixtures, or other structures needing special care, due notice shall be given to the Engineer and to the various public and private agencies or individuals responsible for the utility or structure that is interfered with. Whenever required, all objects shall be strengthened to meet any additional stress that the work herein specified may impose upon it, and any damage caused shall be thoroughly repaired. The entire work shall be the responsibility of the Contractor and the work shall be performed at no additional expense to the Local Public Agency.
- B. The Contractor shall be responsible for all broken mains or utilities encountered during the progress of the work and shall repair and be responsible for correcting all damages to existing utilities and structures at no additional expense to the Local Public Agency. The Contractor shall contact the proper utility or authority to correct or make any changes due to utility or other obstructions encountered during the work, but the entire responsibility and expense shall be with the Contractor.
- C. All damaged items of work or items required to be removed and replaced due to construction shall be replaced or repaired by the Contractor to the complete satisfaction of the property owners and/or the Engineer at no additional expense to the Local Public Agency.

436. [RESERVED]

437. MATERIALS

All materials furnished and used in the completed work shall be new, of best quality workmanship and design and recognized as standard in good construction practices. Whenever a specification number or reference is given, the subsequent amendments (if any) shall be included. The standards set forth in the selection of materials and supplies are intended to conform with those standards adopted by the Local Public Agency. Preference in manufacture shall be given to adopted standards and the Contractor shall further familiarize himself with the requirements of the Local Public Agency when the occasion or choice of materials or supplies so demands.

438. DEFECTIVE MATERIALS, INSPECTION AND TESTING OF MATERIALS FURNISHED, SAMPLES AND ORDERING LISTS

- A. No materials shall be laid or used which are known, or may be found to be in any way defective. Any materials found to be defective at the site of the work or upon installation shall be replaced by the Contractor at his expense. Notice shall be given to the Engineer of any defective or imperfect material. Defective or unfit material found to have been laid shall be removed and replaced by the Contractor with sound and unobjectionable material without additional expense to the Local Public Agency.

The Contractor shall also be responsible to compensate the Local Public Agency, its Engineer, its Design Engineer, and police details for errors, defective work or damage caused by the Contractor. This will be done by direct invoice to the Contractor or monies deducted through invoices.

- B. All materials furnished by the Contractor are subject to thorough inspections and tests by the Engineer.
- C. All ordering lists shall be submitted by the Contractor to the Engineer for approval and shall be approved before the ordering of the materials.

439. CONTRACTOR'S OFFICE AT THE WORK

The Contractor shall maintain, separately and detached from the "Office for the Local Public Agency", during the performance of this contract, an office at the site of the work at which he or his authorized agent shall be present at all times while the work is in progress. The Contractor shall be responsible for equipping his office at the work with all office facilities which he may require at the site. Instructions from the Engineer left at this office shall be considered as delivered to the Contractor. Copies of the contract, drawings and specifications shall be kept at said office ready for use at any time. The obtaining of a suitable site for the location of the office shall be the responsibility of the Contractor; however, the location and site shall be subject to the approval of the Local Public Agency; all costs in connection with the obtaining and use of a suitable office site shall be the responsibility of the Contractor.

440. SANITARY REGULATIONS

- A. Adequate sanitary conveniences for use of workmen on the premises, properly secluded from the public observation, shall be provided and maintained by the Contractor in accordance with the requirements of local and State health authorities and in such manner and at such points as shall be approved and their use shall be strictly enforced. Sanitary waste shall be treated and disposed of in a manner satisfactory to and as directed by the Engineer and the local and State health authorities; under no circumstances shall sanitary wastes be allowed to flow on the surface of the ground.
- B. The Contractor shall rigorously prohibit the committing of nuisances upon the lanes or rights-of-way of the Local Public Agency, about the work or upon adjacent public or private property.
- C. The cost of the sanitary convenience and maintaining same will not be paid for separately, but compensation shall be considered to be included in the prices stipulated for the appropriate items of work as listed in the bid.

441. ALCOHOL

The Contractor shall neither permit nor suffer the introduction or use of alcohol for consumption upon the work embraced in this contract.

442. FINISHING AND CLEANING UP

In completing the backfilling of the trenches, etc. the Contractor shall replace all surface material to the satisfaction of the Engineer, and shall then immediately remove all surplus material, and all tools and other property belonging to him, leaving the entire street or surroundings free and clean and in good order, at no additional expense to the Local Public Agency. The backfilling and removing of the surplus materials shall follow closely upon the completion of the work. The Contractor shall exercise special care in keeping rights-of-way and private lands, upon which work is to be performed, clean and free of debris at all times and to remove tools and other property belonging to the Contractor when they are not being used.

443. CLEAN-UP AT CONTRACTOR'S EXPENSE

In case the Contractor shall fail or neglect, after backfilling, to promptly remove all surplus materials, tools and other incidentals, or promptly do the required repaving when ordered, the Engineer 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.

444. RIGHTS OF ACCESS

Nothing herein contained or shown on the drawings shall be construed as giving the Contractor exclusive occupancy of the work areas involved. The Local Public Agency or any other contractor employed by him, the various utilities companies, contractors or subcontractors employed by the Federal, State or

Local governmental agencies or other utility firms or agencies involved in the general project or upon public rights-of-way, may enter upon or cross the area of work or occupy portions of it as directed or permitted. When the territory of one contract is the convenient means of access to the other, each contractor shall arrange his work in such manner as to permit such access to the other and prevent unnecessary delay to the work as a whole.

445. LOADING

No part of the structures involved in this contract shall be loaded during construction with a load greater than is calculated to carry with safety. Should any accidents or damage occur through any violation of this requirement, the Contractor will be held responsible under his contract and bond.

446. EXISTING UTILITIES OR CONNECTIONS

- A. The Location of existing underground pipes, conduits and structures, as may be shown in the project drawings, has been collected from the best available sources and the Engineer and the Local Public Agency together with its agents does not guarantee, expressly or by implication, the data and information in connection with underground pipes, conduits, structures, electric and telephone ducts and lines, vault and such other parts as to their completeness nor their locations as indicated. The Contractor shall assume that there are existing water, gas, electric, and other utility connections to each and every building enroute, whether they appear on the drawings or not. Any expense and/or delay occasioned by utilities and structures or damage thereto, including those not shown, shall be the responsibility of the Contractor, at no additional expense to the Local Public Agency.
- B. Before proceeding with construction operations, the Contractor shall make such supplemental investigations, including exploratory excavations by hand digging, as he deems necessary to uncover and determine the exact locations of utilities and structures and shall have no claims for damages due to encountering subsurface structures or utilities in locations other than shown on the drawings, or which are made known to the Contractor prior to construction operations. The Contractor shall be responsible and liable for all damages to the existing utilities and structures.

447. POLLUTION OF WATERS

Special care shall be taken to prevent contamination or muddying up or interfering in any way with the stream flows along the line of work. No waste matter of any kind will be allowed to discharge into the stream flows or impounded waters of any ponds or other bodies of water.

448. COMPLETENESS OF WORK

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

449. VEHICLE CROSSINGS

As required or directed by the Engineer, the Contractor shall install in selected locations suitable plank, timber or steel crossings substantially bound and reinforced to sustain vehicular traffic across trench or other excavations. Crossings shall be constructed with side and usable approaches for use by the traveling public, private property owners or firefighting equipment. No separate payment will be made for this work, but the cost shall be included in the prices stipulated for the appropriate items of work as listed in the bid.

450. CLEANING FINISHED WORK

After the work is completed, the sewers, manholes, and structures shall be carefully cleaned free of dirt, broken masonry, mortar, construction and other debris and left in first class condition ready for use. All temporary or excess materials shall be disposed of and the work left broom-clean to the

satisfaction of the Engineer.

451. DUST CONTROL

At all times during the progress of the work under this contract and when directed, the Contractor shall furnish and apply calcium chloride at the sites of the work over the surfaces of all earth piles along excavations, earth stockpiles and surfaces of refilled trenches, and as directed by the Engineer. Payment will be made for furnishing and applying calcium chloride for dust control in accordance with the unit price for this work submitted as part of the bid.

452. CARE OF THE WORK

The Contractor shall be responsible for all damages to persons or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all material delivered and work performed until completion and final acceptance, whether or not the same has been covered by partial payments made by the Local Public Agency.

453. INDEMNITY

See General Contract Provisions in Appendix J.

454. CONSTRUCTION SCHEDULE

In addition to the other requirements specified and prior to issuance of the Notice to Proceed, the Contractor shall confer with the Local Public Agency and the Engineer for the purpose of drafting a construction schedule satisfactory to the Local Public Agency and the Engineer which is to include all the work of this contract. The Contractor shall perform the work of this contract to conform to the construction schedule as approved by the Local Public Agency, except the Local Public Agency reserves the right to amend and alter the construction schedule, as approved, at any time, in a manner which it deems to be in the best interests of the Local Public Agency to do so.

The Contractor shall arrange his work under this Contract to conform with the construction schedule as it shall be revised biweekly by the Contractor, at no additional expense to the Local Public Agency. The Contractor shall notify the Engineer immediately of any circumstances which may affect the performance of the work in accordance with the current construction schedule. Failure to maintain schedule will delay in processing pay applications.

455. OTHER WORK

The Local Public Agency 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 Local Public Agency 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 Local Public Agency is completed.

456. CHANGES AND MODIFICATIONS

The Local Public Agency reserves the right to delete or cancel any item or items or parts thereof as listed in the bid, without recourse by the Contractor. The Local Public Agency also reserves the right to add to any item or part thereof as listed in the Bid. The compensation to be paid the Contractor for such additional extension, appurtenance or item shall be made under the applicable items as listed in the bid. Where no applicable items are provided in the bid for such additional extension, appurtenance or item, the compensation to be paid the Contractor shall be as set forth under Article entitled "CHANGES IN THE WORK, GENERAL CONDITIONS, SECTION 109". No further mobilization charges shall be considered for changes or modifications in the work.

457. LAYOUT OF WORK

A. The Contractor shall provide all materials, labor, equipment, etc., necessary to layout the work and

- shall be responsible for all lines, grades, elevations, measurements, etc. conforming to the American'
- B. The Contractor shall employ a Professional Engineer or Land Surveyor, registered in the State of Rhode Island, for establishing all lines, levels, grades, elevations, measurements, dimensions, locations, etc. The Engineer or Land Surveyor proposed for this work must be approved by the Engineer and the Local Public Agency. In addition, as part of the layout of work, he shall be placed at the disposal of the Engineer and Local Public Agency, from time to time as required, for checking purposes.
 - C. The Contractor shall establish control points, at the direction of the Engineer suitable for the layout of all utility work, both public and private.
 - D. No separate payment will be made for this work, but the cost shall be included in the prices stipulated for the appropriate items of work as listed in the Bid.
 - E. To assist in the layout of the work, survey data prepared by the Engineer, which has been submitted to the Local Public Agency, will be made available to the Contractor.

458. PROTECTION OF LIVES AND HEALTH

- A. In order to protect the lives and health of his employees under the Contract, the Contractor shall comply with all pertinent provisions of the U.S. Department of Labor, "Williams-Steiger Occupational Safety and Health Act of 1970", and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or Causing loss of time from work, arising out of and in the course of employment on work under the contract.
- B. The Contractor alone shall be responsible for the safety, efficiency and adequacy of his plant, appliances and methods, and for any damage which may result from their failure or their improper construction, maintenance or operation.
- C. The Contractor shall be solely responsible for the acts and omissions of his agents, employees and his subcontractors and their agents and employees and shall hold the Engineer, and the Local Public Agency harmless and defend the Engineer, and the Local Public Agency against damage or claims for damages arising out of injuries to others or property of others which result from said acts or omissions.

459. SUBSURFACE STRUCTURES AND UTILITIES

- A. Available information of the location of existing substructures and utilities has been collected from various sources but the results of the investigations shown on the drawings are not guaranteed to be accurate complete.
- B. The Contractor shall make all supplemental investigations including exploratory excavations, by hand digging, as he seems necessary to uncover and determine the exact locations of utilities and structures and shall have no claims for damages due to encountering subsurface structures or utilities in locations other than shown on the drawings, or which are made known to the Contractor prior to construction operations.

460. PROTECTION OF CONSTRUCTION FEATURES

The Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavements, utilities, building vaults, adjoining property and such incidentals and to avoid damage thereto. The Contractor shall completely repair the damage caused by his operations at no additional expense to the Local Public Agency.

461. TEST PITS

At locations where new utilities are to connect to existing utilities, the Contractor shall not proceed with the work until a test pit has been dug to determine existing conditions such as inverts of sanitary or storm sewers; outside diameter of water pipes so that sleeves or couplings can be correctly purchased, etc.

462. LOCATION OF WORK

The Contractor's attention is directed to the fact that work under this contract is performed strictly within the City of Providence.

463. PRE-CONSTRUCTION CONFERENCE

- A. Within ten (10) days after award of Contract, a preconstruction conference shall be held between the Local Public Agency, the City of Providence Department of Public Works, the Contractor, the Engineer, the Design Engineer, and other City of Providence or other regulatory agencies having jurisdiction over the project area.
- B. No work of any nature shall be performed by the Contractor until the pre-construction conference has been held, and all required permits have been obtained.

464. NOTIFICATION PRIOR TO CONSTRUCTION

Not less than ten (10) calendar days prior to the start of any work under this contract the Contractor shall send written notification of his intentions to the following:

PROVIDENCE DEPARTMENT OF PUBLIC WORKS

700 Allens Avenue
Providence, RI 02905 Michael D. Borg
Director
(401) 467-7950

DEPARTMENT OF PLANNING AND DEVELOPMENT

444 Westminster Street
Providence, RI 02903
Robert Azar
Deputy Director
(401) 680-8524

RIPTA

705 Elmwood Avenue
Providence, RI 02907
(401) 781-9400

RIDOT

Two Capitol Hill
Providence, RI 02903
Robert Rocchio,
Chief Engineer
(401) 222-2023

NATIONAL GRID

280 Melrose Street
Providence, RI 02907-2152
Thomas Capobianco
Lead Program Manager, City/State Construction, New England South
(401) 784-7248

NATIONAL GRID – GAS

40 Sylvan Road, Third Floor, West Wing
Waltham, MA 02451 - 1120
Ms. Laeyeng Hunt, PE
Manager of New England Public Works
(781) 907-2821

VERIZON

85 High Street
Pawtucket, RI 02865
Peter DeCosta
State Highway Coordinator
(774) 409-3177

COX COMMUNICATIONS

9 J.P. Murphy Hwy.
West Warwick, RI 02893
David Veilla

Right Of Way Agent II
(401) 615-1284

PROVIDENCE WATER SUPPLY BOARD

552 Academy Avenue
Providence, RI 02808
Mr. Peter LePage, Sr., P.E.
Manager of Engineering
(401) 521-6300 Ext. 7242

PROVIDENCE DEPARTMENT OF COMMUNICATIONS

1 Communications Place, West Exchange Street
Providence, RI 02903
Ms. Carolyn Arias
Administrative Crew Chief
(401) 243-6005

NARRAGANSETT BAY COMMISSION

1 Service Road
Providence, RI 02905
David Bowens
Engineering Manager
461-6540

This notification shall set forth the Contractor's proposed sequence of construction and shall give the approximate dates of when each street or phase of the work is expected to begin. The sequence of construction shall also state the expected completion dates of each street or phase of the work.

Copies of each notification shall be sent to the Providence Redevelopment Agency, 444 Westminster Street, Suite 3A, Providence, Rhode Island, 02903. The notifications shall reference the Project, include a description of the work to be performed, including street names, and shall indicate when the construction will start. Additionally, the contractor shall request the name and telephone number of the person or department to be contacted when assistance is required, copies of all replies shall be forwarded to the Design Engineer.

465. NON-INTERFERENCE WITH ADJACENT PROPERTIES

All work under this Contract shall be performed in a manner which will minimize interference with the normal neighborhood operations.

466. [RESERVED]

467. WORK OUTSIDE REGULAR HOURS

Night work or work on Saturdays, Sundays or legal holidays requiring the presence of an engineer or inspector, will not be permissible except in case of emergency, and only upon the approval of the Local Public Agency. Should it be desired or required by the city 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 Engineer and/or Design Engineer for performing such night work shall be provided by the Contractor. For night work, work on Saturdays, Sundays, or legal holidays, if any be performed, the Contractor will receive no extra payment, but compensation shall be considered as having been included in the prices stipulated for the appropriate items of work as listed in the bid. All night work must be approved in writing by the Local Public Agency.

468. FIRE PREVENTION AND PROTECTION

Federal laws (Occupational Safety and Health Act) and all State and municipal rules and regulations with respect to fire prevention, fire-resistant construction and fire protection shall be strictly adhered to and all work and facilities necessary therefore shall be provided and maintained by the Contractor in an approved manner.

All fire protection equipment such as water tanks, hoses, pumps, extinguishers, and other materials and

apparatus shall be provided for the protection of the contract work, temporary work and adjacent property. Trained personnel experienced in the operation of all fire protection equipment and apparatus shall be available on the sites whenever work is in progress and at such other times as may be necessary for the safety of the public and the work.

469. PLANIMETER

For estimating quantities in which the computation of areas by analytic and geometric methods would be comparatively laborious, it is stipulated and agreed that the planimeter shall be considered an instrument of precision adapted to the measurement of such areas.

470. DAILY REPORTS

The Contractor shall submit, on an approved form, daily activity reports for the duration of the project. The reports shall indicate all personnel currently employed on the work including each trade and every subcontractor; all equipment and whether such equipment was idle for the particular day; a general description of all work accomplished; any authorized extra work (time and material reports shall be submitted on separate forms).

471. OTHER PROHIBITED INTERESTS

No official of the City who is authorized in such capacity and on behalf of the City to negotiate, make, accept or approve, or to take part in negotiating, making, accepting or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this Contract or in any part hereof. No officer, employee, architect, attorney, engineer or inspector of or for the City who is authorized in such capacity and on behalf of the City to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

472. WATER

The Contractor shall provide and maintain at his own expense an adequate supply of water for his use for construction and domestic consumption, and to install and maintain necessary supply connections and piping for same, but only at such locations and in such manner as may be approved by the City. All water shall be carefully conserved. Before final acceptance, temporary connections and piping installed by the Contractor shall be removed in a manner satisfactory to the City.

473. ELECTRICITY

All electric current required by the Contractor shall be furnished at his own expense and all temporary connections for electricity shall be subject to approval of the Engineer. All temporary lines shall be furnished, installed, connected and maintained by the Contractor in a workmanlike manner satisfactory to the Engineer and shall be removed by the Contractor in like manner at his own expense prior to completion of the construction.

474. DRAWINGS

- A. The Contractor shall use the dimensions of the Drawings as shown. Measurements shall not be by scale. Full size details have preference over scale details, and large-scale details and photographs have preference over small.
- B. If discrepancies exist between Drawings and Specifications, or if necessary measurements and work specified or shown is obviously incorrect or impossible to execute, and/or if figures fail to check, the Contractor shall bring these facts to the attention of the Design Engineer. The decision of the Design Engineer as to the intention of the Contract Documents shall be final. No work shall start until all such problems have been resolved.

475. PERMITS

CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS NOT ALREADY OBTAINED BY THE LOCAL PUBLIC AGENCY, THE ENGINEER, AND/OR THE DESIGN ENGINEER.

476. [RESERVED]

477. COORDINATION WITH OTHER CONTRACTS

The Contractor is hereby notified that multiple construction projects may be ongoing throughout the construction period. The contractor shall attend meetings as required by the Local Public Agency, at a location to be determined, to assure cooperation between all involved parties.

478. JOB SITE POSTERS

The contractor must comply with US Department of Labor requirements for job site posters per Exhibit A at the end of this Section.

Exhibit A

The following list of Job Site Posters shows the required posters that should be displayed:

Job Site Posters

Required US Department of Labor posters are available on the USDOL website at <http://www.dol.gov/osbp/sbrefa/poster/matrix.htm>. FHWA posters are available at <http://www.fhwa.dot.gov/programadmin/contracts/coreloc.cfm>. The revision dates shown in this listing were current as of 11/27/2007.

OFCCP 1420 Revised 2008	Equal Opportunity is the Law	Required by Executive Order 11246, as amended; Section 503 of the Rehabilitation Act of 1973, as amended; 38 U.S.C. 4212 of the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended; 41 CFR Chapter 60-1.42; 41 CFR 60-250.4(k); 41 CFR 60-74 1.5(a); and FHWA-1273, §II(3)(d). Available at USDOL website in English, Spanish, and Chinese by telephone at 1-888-9-SBREFA, or by email at Contact.OSBP@dol.gov .
	Contractor's EEO policy statement	Required by 41 CFR 60-741.44 through FHWA-1273, §II(1)(b).
	Letter appointing contractor's EEO officer for project	Required by 41 CFR 60-741.44 through FHWA-1273, §II(1)(b).
FHWA-1022 Revised 9/1994	Notice - Federal Aid Projects	False statements notice Required by 18 CFR 1020 and 23 CFR 635.119 Available on FHWA website.
FHWA-1495 Revised 1981	Wage Rate Information	May be substituted for WH-1321 per FHWA-1273, §IV(1)(a). Available on FHWA website.
WH-1321 Revised 1/1986	Notice to Employees	Davis-Bacon wage rate poster Required by 29 CFR 5.5(a)(1) and FHWA-1273, §IV(1)(a) Enforcement by STA and/or USDOL. Available at USDOL website, by telephone at 1-888-9-SBREFA, or by email at Contact.OSBP@dol.gov .
	Actual wage rates	Required by both FHWA-1495 and WH-1321.
OSHA-3165 Revised 2006	Job Safety & Health Protection	Required by 29 USC 657(c), 29 CFR 1903.2 through FHWA-1273, §VIII(1). Enforcement through OSHA. Available at USDOL website in English and Spanish, by telephone at 1-888-9-SBREFA, or by email at Contact.OSBP@dol.gov .
	Emergency phone numbers	Required by 29 CFR 1926.50(f) through FHWA-1273, §VIII(1) except on areas with 911 for emergencies
WH-1088 Revised 6/2007	Your Rights - Federal Minimum Wage	Needed on projects where Davis-Bacon rates do not apply per 29 USC 211, 29 CFR 516.4 posting of notices. Enforcement by USDOL. Available at USDOL website in English and Spanish, by telephone at 1-888-9-SBREFA, or by email at Contact.OSBP@dol.gov
WH-1284 Revised 7/2007	Notice to Workers with Disabilities Paid at Special Minimum Wages	Required by 29 CFR 525.14 Enforcement by USDOL. Available at USDOL website in English and Spanish, by telephone at 1-888-9-SBREFA, or by email at Contact.OSBP@dol.gov
WH-1420 Revised 8/2001	Your Rights under the Family and Medical Leave Act of 1993	Required by 29 CFR 825.300 and 825.400 for employers of more than 50 people. Enforcement by USDOL. Available at USDOL website in English and Spanish, by telephone at 1-888-9-SBREFA, or by email at Contact.OSBP@dol.gov
WH-1462 Revised 6/2003	Notice: Employee Polygraph Protection Act	Required by 29 CFR 801.6. Enforcement by USDOL. Available at USDOL website in English and Spanish, by telephone at 1-888-9-SBREFA, or by email at Contact.OSBP@dol.gov
	Water quality related information (Example: NPDES Notice of Intent)	Project specific. Need to check with the agency administering the NPDES program in the project area for posting requirements. Enforcement by that agency.

GENERAL CONTRACT PROVISIONS

“Owner” shall mean the Providence Redevelopment Agency, its assigns, heirs, successors-in-interest, agents, and/or representatives.

“Contractor” shall mean the entity titled as such on the Contract to which these provisions are appended.

SECTION 1 - OWNERSHIP OF DOCUMENTS:

All documents created, modified, supplemented, reproduced, altered pursuant to this Contract, including but not limited to those documents mentioned or envisioned in herein are the sole property of the Owner, whether or not the work for which they are made be executed. Use of the plans and specifications included as part of this Contract shall be in accordance with the terms of this Contract, and for any use not in connection with this Contract, shall be only with the written authorization of the Owner.

SECTION 2 - MINIMUM INSURANCE REQUIREMENTS

The CONTRACTOR shall, prior to commencing performance under the contract, attach and submit appropriate certificates of insurance, naming the Owner as additional insureds, to include:

- (A) General Commercial Liability coverage with limits of \$1,000,000 per each occurrence and \$5,000,000 in the Aggregate (for the Project). Such coverage shall protect the CONTRACTOR and any of its Subcontractors from any and all claims which may arise out of the CONTRACTOR’s operations and completed operations under the Contract for which the CONTRACTOR, its Subcontractors or any persons employed by them shall be liable, including but not limited to any such claims for bodily injury, death, disability, sickness, and damage or destruction to equipment, to property, or to the Work.
- (B) Workers Compensation – Statutory coverage.
- (C) Automobile Liability – owned, non-owned, and hired automobile coverage with a combined single limit of \$1,000,000.
- (D) Umbrella – with limit of \$5,000,000 over General Liability and Automobile Liability.
- (E) Property Coverage – The Contractor shall purchase and maintain during the life of this contract “All Risk” insurance coverage for their own equipment and property, with provision for Waiver of Subrogation against the Owner.

The above-listed coverage must be provided on policies and on ACORD certificates from insurance companies that are financially rated A-VI or better by A.N. Best, by which the successful bidder will indemnify and hold harmless the Owner from and against all loss or damages arising from the performance under the Contract, including all claims for personal injury or damage to property sustained by third persons, or their agents, servants and/or those claimed under them, as specified above. The CONTRACTOR shall provide a waiver of subrogation in favor of the Owner on a primary noncontributory basis.

SECTION 3 - MATERIALS AND EQUIPMENT:

The CONTRACTOR shall only prepare specifications that clearly establish the type and quality of materials/equipment, or application of each item in the Project, without writing a closed specification, and shall prepare them in a manner which encourages competitive bidding.

SECTION 4 - OWNER'S REPRESENTATIVE:

For the purpose of the Contract, the Executive Director, Providence Redevelopment Agency, City of Providence, is hereby designated as the representative of the Owner with full authority to act in all matters pertaining to this Contract for and in the name of the Owner, and may delegate such authority to such other representatives of the City of Providence and/or Providence Redevelopment Agency as he/she deems in the best interest of the Owner for the proper administration of this Project.

SECTION 5 - REGULATIONS

The CONTRACTOR shall conduct all work funded under this Contract in compliance with the following:

- (A) Special Award Conditions related to the work underlying this Contract;
- (B) 2 CFR Part 200 - Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards;
- (C) Economic Development Administration (EDA) Standard Terms and Conditions for Construction Projects;
- (D) All local, state, and federal laws; and
- (E) Any subsequent EDA and/or City of Providence Policy Memos, Regulations, Communications, and guidance.

SECTION 6 - DRUG FREE WORKPLACE

The CONTRACTOR shall comply with the applicable provisions of the Drug-Free Work Place Act of 1988 (Public Law 100-690, Title V, Subtitle D; 41 USC § 701 et seq.) and maintain a drug-free work environment; and the final rule, government-wide requirements for drug-free work place (grants), issued by the Office of Management and Budget and the Department of Defense (32 CFR part 280, subpart F) to implement the provisions of the Drug-Free Work Place Act of 1988 is incorporated by reference and the Subrecipient shall comply with the relevant provisions thereof, including any amendments to the final rule that may hereafter be issued which are made apart of this Contract.

SECTION 7 - CONTRACTOR AND COVERED ENTITIES

All services supported under this Contract must be in compliance with the following regulations:

- (A) Federal Labor Standards Provisions - All projects with more than \$2,000 in EDA funding for construction shall comply with EDA requirements pertaining to such contracts and the applicable requirements of the regulations of the Department of Labor under 29 CFR parts 3, 5, and 5a, governing the payment of wages and the ratio of apprentices and trainees to journeymen. The CONTRACTOR shall cause or require to be inserted in full, to the extent applicable, in all such contracts subject to such regulations, provisions meeting the requirements of 29 CFR 5.5.
- (B) The Copeland Anti-Kickback Act (40 USC, Chapter 3, Section 276c and 18 USC, Part 1, Chapter 41, Section 874; and 29 CFR part 3) requires that workers be paid weekly, that deductions from workers' pay be permissible, and that contractors maintain and submit weekly payrolls.
- (C) The Contract Work Hours and Safety Standards Act (40 USC, Chapter 5, Sections 326-332; and 29 CFR Part 4, 5, 6 and 8; 29 CFR parts 70 to 240) applies to contracts over \$100,000 and requires that workers receive overtime compensation (time and one-half pay) for hours they have worked in excess of 40 hours in one week. Violations under this Act carry a liquidated damages penalty (\$10 per day per violation).
- (D) Executive Order 11246 as amended by Executive Order 11375 – The CONTRACTOR hereby agree to place in every contract and subcontract for construction exceeding \$10,000 the Notice of Requirement for Affirmative Action to ensure Equal Employment Opportunity. The CONTRACTOR furthermore agrees to insert the appropriate Goals and Timetables issued by the Department of Labor in such contracts and subcontracts. The Executive Orders also require contractors with 51 or more employees and contracts of \$50,000 or more to implement affirmative action plans to increase the participation of minorities and women in the workplace if a workforce analysis demonstrates their under-representation, meaning that there are fewer minorities and women than would be expected given the numbers of minorities and women qualified to hold the positions available.
- (E) Debarred and Suspended Contractors – The CONTRACTOR shall not enter into any agreement, written or oral, with any contractor, subcontractor, consultant, or sub-consultant without the prior determination by the Owner of said entity's eligibility pursuant to 2 CFR 180 and Executive Orders 12549 and 12689. An entity is not eligible to receive funds if the entity is listed on the Federal Consolidated List of Debarred, Suspended, and Ineligible Contractors.
- (F) Byrd Anti-Lobbying Amendment – The CONTRACTOR shall file a required certification stating that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal

contract, grant or any other award covered by 31 U.S.C. 1352. In addition, the CONTRACTOR will ensure that all contracts executed as a result of this Contract include provisions that each tier in contracting must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the Owner.

SECTION 8 - RIGHT TO MONITOR

Owner shall have the right to monitor CONTRACTOR's compliance with all applicable requirements by whatever means the Owner deems appropriate. This right shall continue throughout and until Owner's grant closeout with EDA.

SECTION 9 - RIGHT TO INSPECT

Owner, its agents and designees, shall have the right, from time to time, to inspect the Project site for purposes of ensuring compliance with the terms and conditions of this Contract and EDA's Rules and Regulations.

SECTION 10 - RECORD RETENTION AND ACCESS TO RECORDS

The CONTRACTOR agrees that the Owner, EDA, and the Comptroller General of the United States or any of their authorized representatives, has the right to access the Project and any books, documents, papers or other records of the CONTRACTOR or the Project, which are pertinent to this Contract in order to make audits, examinations, excerpts or transcripts. The CONTRACTOR will maintain all books and records pertaining to this Contract throughout and until Owner's grant closeout with EDA or for a three (3) year period following the final payment under this Contract, whichever period is longer in duration.

SECTION 11 - LIMITATION OF LIABILITY

The CONTRACTOR acknowledges that the Owner shall not be liable to the CONTRACTOR for the completion of, or the failure to complete, any activities, which are a part of CONTRACTOR's services under the Project contemplated by this Contract. The CONTRACTOR acknowledges that should the Owner find a material default or noncompliance with this Contract, as determined by Owner in its sole discretion and, as a result thereof, cease disbursement of funds, the Owner shall incur no liability to the CONTRACTOR.

SECTION 12 - NO DELEGATION OF DUTIES

The CONTRACTOR shall remain fully obligated under the provisions of this Contract notwithstanding its designation of any third party or parties for the undertaking of all or any part of the Project. Any party or parties so designated shall also be obligated to perform such duties under the same restrictions and requirements as if the CONTRACTOR were performing them.

SECTION 13 - NO THIRD PARTY BENEFICIARIES:

Nothing contained herein shall create any relationship, contractual or otherwise, with, or any rights in favor of, any third party.

SECTION 14 - SUCCESSORS AND ASSIGNS:

Neither the Owner nor the CONTRACTOR shall assign its rights hereunder. Subject to the provision of the immediately preceding sentence, each party hereto binds itself, its successors, assigns and legal representatives to the other and to the successors, assigns and legal representatives of such other party.

SECTION 15 - MINORITY/WOMEN'S BUSINESS ENTERPRISES

The CONTRACTOR agrees to develop and implement an outreach program for minority and women business enterprises. Furthermore, the CONTRACTOR will maintain the records of such outreach program, including the data indicating the racial/ethnic or gender character of each business entity receiving a contract or subcontract to be paid with EDA Funds, as well as additional details regarding the amount of the contract, subcontract, and documentation of CONTRACTOR's steps to assure that minority business and women's business enterprises have an equal opportunity to compete for contracts and subcontracts as sources of supplies, equipment, construction and services. The goal of the MBE/WBE participation for this Project is six and nine-tenths percent (6.9%).

SECTION 16 - AUDIT STANDARDS

To the extent applicable, the CONTRACTOR agrees to comply with the audit standards outlined in Subpart F of 2 CFR Part 200-Audit Requirements, and to prepare an audit within two hundred seventy (270) days after the close of any fiscal year in which the CONTRACTOR expends federal awards of at least \$750,000 (or such other amount as specified by the Director of the Office of Management and Budget). Audits must comply with the provisions of OMB Uniform Guidance 2 CFR Part 200, must be conducted by an independent certified public accountant ("CPA"), and must include a management letter and any responses thereto and CPA-prepared financial statements. Such financial statements must include a balance sheet, operating statements, source and use of funds statement, Schedule of Expenditures of Federal Awards and sufficient supporting schedules and notes as may be necessary for the Owner to determine the financial status of CONTRACTOR's activities. If such audit contains material findings, the CONTRACTOR must provide a copy of the audit, together with any comments and plans for correction, to the Owner. If such audit contains no material findings, the CONTRACTOR is not required to submit a copy to the Owner unless otherwise required by the terms of this Contract; provided, however, that upon request the CONTRACTOR must provide a copy of any and all audits performed during the term of this Contract to the Owner, EDA, or any designee thereof. The Owner reserves the right, in its sole discretion, to require an audit of any CONTRACTOR that expends federal funds during its fiscal year, regardless of amount. The CONTRACTOR acknowledges that, in the event the Owner requires an audit, Owner or EDA funds may not be used to offset the costs associated with the audit. The CONTRACTOR assumes full responsibility for compliance with this paragraph.

SECTION 17 - FINANCIAL MANAGEMENT SYSTEM

The CONTRACTOR will establish and maintain a financial management system pursuant to 2 CFR Part 200, Subpart D, that will provide for a) accurate, current and complete disclosure of the financial results of the functions and services performed under this Contract; and b) record and identify the source and application of funds for the activities, functions and services performed pursuant to this Contract. These records will contain information pertaining to federal and state funds received, and assets, liabilities, expenditures, and income; c) effective control over and accountability for all funds, property, and other assets. The CONTRACTOR will safeguard all such assets and will assure that they are used solely for authorized purposes as provided in this Contract; and d) accounting records that are supported by source documentation.

SECTION 18 - INDEMNIFICATION

The CONTRACTOR shall hold harmless and indemnify the Owner from and against any and all claims, costs and/or damages (including reasonable attorneys' fees and costs) arising from (i) any injury or damage to persons or property that may occur as a result of work performed in connection with its services under this Project, (ii) any third party, including without limitation, development professionals and contractors who may be engaged by the CONTRACTOR; and (iii) any third party claiming that a third party beneficiary relationship has been established between the Owner and such third party, it being the intention of the parties hereto that no such relationships be created or established.

SECTION 19 - CONTRACTOR'S REPRESENTATIONS

CONTRACTOR represents to the Owner as follows:

- (A) It has no knowledge of any notices or violations of federal or state statutes or regulations or municipal ordinances or orders, or requirements of any governmental body or authority to whose jurisdiction any of the real estate making up the Project is subject;
- (B) Its execution, delivery and carrying out of the terms and conditions of this Contract have been duly authorized and will not conflict with or result in a breach of its Articles of Incorporation or by-laws, or any vote of members or directors or of the terms or provisions of any existing law, regulation or order of any court or government body or authority or agreement to which it is a party or by which it is bound;
- (C) There has been no material adverse change in its financial condition since the submitting of its bid proposal;
- (D) The representations, warranties and statements of fact of the CONTRACTOR as set forth in its bid proposal and this Contract are true, accurate and complete in all material respects as of the date hereof;

- (E) It has not failed to provide the Owner with any material information necessary to make the representations, warranties, and statements contained herein; and are not misleading, in light of the circumstances under which they were made;
- (F) The CONTRACTOR has duly authorized the officer executing this Contract to execute, in its name and on its behalf, this Contract and all such other documents and instruments as the Owner may request in connection therewith; and
- (G) The CONTRACTOR has no knowledge of any existing, threatened or pending actions by any person or governmental authority against it which would have a material adverse effect on its ability to acquire and complete any necessary construction or renovations to the proposed activity.

SECTION 20 - EVENTS OF DEFAULT AND PURSUIT OF REMEDIES

The occurrence of any one or more of the following events shall constitute an Event of Default hereunder:

- (A) Any breach or non-compliance by the CONTRACTOR with the conditions, provisions, obligations, duties, agreements, covenants, representations and warranties made and set forth in this Contract and any/all accompanying documents, any documents incorporated by reference in Section 5 above, as the same may be amended from time to time, as determined by the Owner in its sole discretion; or
- (B) Any representation or warranty made herein or in any/all CONTRACTOR submissions or documents related hereto, accompanying closing documents, addenda, exhibits, amendment, binder, and/or other instruments executed in connection with this Contract is proven to be false or misleading in any respect, whether through commission or omission.

Upon the occurrence of an Event of Default, the Owner may, at its option, send the CONTRACTOR a Notice of Default stating that CONTRACTOR has thirty (30) days to cure said default. In the event CONTRACTOR fails to cure said default within thirty days, the Owner may, upon ten (10) business days' notice, terminate or suspend this Contract, without presentment, demand, protest or notice of any kind, all of which are hereby expressly waived by CONTRACTOR.

The CONTRACTOR agrees to pay all costs and expenses, including reasonable attorneys' fees, incurred by the Owner in collection of the moneys due hereunder or in the exercise or defense of its rights and powers under this Contract. In addition, the Owner may pursue any other remedies, legal or equitable, available to it in the event of CONTRACTOR's default, fraud or misrepresentation, whether through commission or omission.

SECTION 21 - TERMINATION

This Contract Agreement shall remain in effect until the Owner's grant closeout or the CONTRACTOR's final payment is received, whichever is longer in duration.

In accordance with 2 CFR 200, the Owner may suspend or terminate this Contract if the CONTRACTOR materially fails to comply with any terms of this Contract Agreement, which include (but are not limited to) the following:

- (A) Failure to comply with the terms and conditions herein, or the terms and conditions found in the documents incorporated by reference in Section 5 above;
- (B) Failure, for any reason, of the CONTRACTOR to fulfill in a timely and proper manner its obligations under this Contract;
- (C) Ineffective or improper use of funds provided under this Contract; or
- (D) Submission by the CONTRACTOR to the Owner of reports that are incorrect or incomplete in any material respect.

In accordance with 2 CFR 200, this Contract may also be terminated for convenience by either the Owner or the CONTRACTOR, in whole or in part, by setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated.

SECTION 22 - DISPUTE RESOLUTION

In the event of any dispute or disagreement between the parties with respect to this Contract, the parties shall make a good faith effort to resolve the dispute within thirty (30) days of written notice by either party requesting a meeting to resolve the dispute. If the parties are unable to resolve the dispute within thirty (30) days, unless otherwise agreed to by the parties, the parties agree to engage in mediation of the dispute in Providence, Rhode Island by an independent and neutral person qualified to act as a mediator.

If the parties are unable to reach a mutually acceptable resolution to the dispute within thirty (30) days following an initial mediation conference, or within sixty (60) days following the written request for mediation, the parties agree that the matter may, upon written agreement, be submitted to arbitration in Providence by three (3) impartial arbitrators, who shall be experienced in mediation and arbitration and knowledgeable regarding any and all matters related to this agreement, one to be chosen by each party and the third by the two so chosen.

If not submitted to arbitration upon written agreement, each party submits to the jurisdiction of the courts situated in Providence County, State of Rhode Island.

SECTION 23 - NO WAIVER

No delay or omission by the Owner to exercise any of its rights hereunder shall constitute an assent or waiver by it to or of CONTRACTOR's breach of or noncompliance with the terms of this Contract, whether the Owner has knowledge of such breach or noncompliance, and no other

assent or waiver, express or implied, by the Owner to or of any such breach or noncompliance shall be deemed as assent or waiver of any other or succeeding breach or noncompliance.

SECTION 24 - BENEFIT

This Contract shall inure to the benefit of and shall be binding upon the parties hereto and their respective successors and assigns; provided, however, that no assignment by CONTRACTOR of its rights under this Contract shall be of any effect unless the prior written consent of the Owner and in accordance with the terms herein.

SECTION 25 - SEVERABILITY

If any provision of this Contract shall be deemed unenforceable or invalid, such provision shall not affect, impair or invalidate any other provision of this Contract. Any provision of this Contract held invalid or unenforceable only in part or degree will remain in full force and effect to the extent not held invalid or unenforceable.

SECTION 26 - GOVERNING LAW

This Contract is being executed and delivered in the State of Rhode Island and shall in all respects be governed, construed, applied and enforced in accordance with the laws of the State of Rhode Island, the City of Providence Home Rule Charter, the Providence Code of Ordinances, and the Providence Redevelopment Agency By-laws, as amended.

SECTION 27 - SECTION HEADINGS AND SUBHEADINGS

The section headings and subheadings contained in this Contract are included for convenience only and shall not limit or otherwise affect the terms of this Contract.

SECTION 28 - NOTICES

All notices to be given pursuant to this Contract shall be in writing and shall be deemed given when mailed by certified, registered mail, return receipt requested, or a commercially-acceptable overnight service, to the parties hereto at the addresses set forth below, or to such other place as a party may from time to time designate in writing:

To the Owner:

Providence Redevelopment Agency
City of Providence
444 Westminster Street, Suite 3A
Providence RI 02903

To the CONTRACTOR:

XXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXX

SECTION 29 - ENTIRE AGREEMENT

This Contract and all attachments, addendums, and/or exhibits attached hereto shall represent the entire agreement between the Owner and the CONTRACTOR and may not be amended or modified except in writing signed by each party hereto and in accordance with this section.

Amendments shall make specific reference to this Contract, will be executed in writing, and signed by duly authorized representatives of each party. Such amendments shall not invalidate this Contract, nor relieve or release the Owner or the CONTRACTOR from its obligations under this Contract.

The Owner may, in its discretion, amend this Contract to conform with federal, state, or local governmental guidelines, policies, and available funding amounts, or for other reasons. If such amendments result in a change in the funding, services, or Project schedule of the activities to be undertaken as part of this Contract, such modifications will be incorporated only by written amendment signed by both the Owner and the CONTRACTOR.