

COMMONWEALTH OF MASSACHUSETTS



CONTRACT DOCUMENTS AND SPECIAL PROVISIONS

PROPOSAL NO.	610647-133932
P.V. =	\$7,690,000.00
PLANS	YES

FOR

**Federal Aid Project No. STP-0035(068)X
Corridor Improvements on Route 6 at Swifts Beach Road**

in the Town of**WAREHAM**

In accordance with the STANDARD SPECIFICATIONS
for HIGHWAYS and BRIDGES dated 2026

This Proposal to be opened and read:

TUESDAY, MAY 5, 2026 at 2:00 P.M.

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DOCUMENT 00010

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*** END OF DOCUMENT ***

DOCUMENT 00104

**NOTICE TO CONTRACTORS**

Electronic proposals for the following project will be received through the internet using www.bidx.com until the date and time stated below and will be posted on www.bidx.com forthwith after the bid submission deadline. No paper copies of bids will be accepted. All Bidders must have a valid vendor code issued by MassDOT in order to bid on projects. Bidders need to apply for a Digital ID at least 14 days prior to a scheduled bid opening date with www.bidx.com.

TUESDAY, MAY 5, 2026 at 2:00 P.M. ****WAREHAM****Federal Aid Project No. STP-0035(068)X****Corridor Improvements on Route 6 at Swifts Beach Road******Date Subject to Change**PROJECT VALUE = \$7,690,000.00

Bidders must be pre-qualified by the Department in the HIGHWAY - CONSTRUCTION category to bid on the above project. An award will not be made to a Contractor who is not pre-qualified by the Department prior to the opening of Proposals.

All prospective Bidders who intend to bid on this project must obtain "Request Proposal Form (R109)". The blank "Request Proposal Form (R109)" can be obtained at:
<https://www.mass.gov/prequalification-of-horizontal-construction-firms>.

All prospective Bidders must complete and e-mail an electronic copy of "Request Proposal Form (R109)" to the MassDOT Director of Prequalification for approval:
prequal.r109@dot.state.ma.us.

Proposal documents for official bidders are posted on www.bidx.com. Other interested parties may receive informational Contract Documents containing the Plans and Special Provisions, free of charge.

Bids will be considered, and the contract awarded in accordance with statutes governing such contracts in accordance with Massachusetts General Laws Chapter 30 § 39M.

The Project Bids File Attachments folder for proposals at www.bidx.com shall be used for submitting at the time of bid required information such as the Bid Bond required document, and other documents that may be requested in the proposal.

NOTICE TO CONTRACTORS (Continued)

All parties who wish to have access to information plans and specification must send a "Request for Informational Documents" to MassDOTBidDocuments@dot.state.ma.us.

A Proposal Guaranty in the amount of 5% of the value of the bid is required.

This project is subject to the schedule of prevailing wage rates as determined by the Commissioner of the Massachusetts Department of Labor and Workforce Development, and the Division of Occupational Safety, and the United States Department of Labor.

The Massachusetts Department of Transportation, in accordance with Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby affirmatively ensures that for any contract entered into pursuant to this advertisement, all bidders, including disadvantaged business enterprises, will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin in consideration for an Award.

This Proposal contains the "STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)". The goals and timetables applicable to this proposal for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all work, are contained in Appendices A and B-80 of the above specifications.

The Contractor (hereinafter includes consultants) will comply with the Acts and Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this Contract as contained in Appendices C and D of the above specifications.

NOTICE TO CONTRACTORS (Continued)**PRICE ADJUSTMENTS**

This Contract contains price adjustments for hot mix asphalt and Portland cement mixtures, diesel fuel, and gasoline. For reference the base prices are as follows: liquid asphalt \$640.00 per ton, Portland cement \$425.13 per ton, diesel fuel \$4.452 per gallon, and gasoline \$2.955 per gallon, and Steel Base Price Index 362.6. MassDOT posts the **Price Adjustments** on their Highway Division's website at

<https://www.mass.gov/massdot-contract-price-adjustments>

This Contract contains Price Adjustments for steel. See Document 00813 - PRICE ADJUSTMENT FOR STRUCTURAL STEEL AND REINFORCING STEEL for their application and base prices.

MassDOT projects are subject to the rules and regulations of the Architectural Access Board (521 CMR 1.00 et seq.)

Prospective bidders and interested parties can access this information and more via the internet at WWW.COMMBUYS.COM.

BY: Phillip Eng, Interim MassDOT Secretary
Jonathan L. Gulliver, Undersecretary and Highway Administrator
SATURDAY, MARCH 28, 2026

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DOCUMENT 00210

REQUIREMENTS OF MASSACHUSETTS GENERAL LAWS
CHAPTER 30, SECTION 39R;
CHAPTER 30, SECTION 39O

July 1, 1981, updated October 2016

M.G.L. c. 30, § 39R. Award of Contracts; Accounting Statements; Annual Financial Statements; Definitions.

(a) The words defined herein shall have the meaning stated below whenever they appear in this section:

- (1) "Contractor" means any person, corporation, partnership, joint venture, sole proprietorship, or other entity awarded a contract pursuant to sections thirty-eight A1/2 to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A to forty-four H, inclusive, of chapter one hundred and forty-nine, which is for an amount or estimated amount greater than one hundred thousand dollars.
- (2) "Contract" means any contract awarded or executed pursuant to sections thirty-eight A1/2 to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A through forty-four H, inclusive, of chapter one hundred and forty-nine, which is for amount or estimated amount greater than one hundred thousand dollars.
- (3) "Records" means books of original entry, accounts, checks, bank statements and all other banking documents, correspondence, memoranda, invoices, computer printouts, tapes, discs, papers and other documents or transcribed information of any type, whether expressed in ordinary or machine language.
- (4) "Independent Certified Public Accountant" means a person duly registered in good standing and entitled to practice as a certified public accountant under the laws of the place of his residence or principal office and who is in fact independent. In determining whether an accountant is independent with respect to a particular person, appropriate consideration should be given to all relationships between the accountant and that person or any affiliate thereof. Determination of an accountant's independence shall not be confined to the relationships existing in connection with the filing of reports with the awarding authority.
- (5) "Audit", when used in regard to financial statements, means an examination of records by an independent certified public accountant in accordance with generally accepted accounting principles and auditing standards for the purpose of expressing a certified opinion thereon, or, in the alternative, a qualified opinion or a declination to express an opinion for stated reasons.
- (6) "Accountant's Report", when used in regard to financial statements, means a document in which an independent certified public accountant indicates the scope of the audit which he has made and sets forth his opinion regarding the financial statements taken as a whole with a listing of noted exceptions and qualifications, or an assertion to the effect that an overall opinion cannot be expressed. When an overall opinion cannot be expressed the reason therefor shall be stated. An accountant's report shall include as a part thereof a signed statement by the responsible corporate officer attesting that management has fully disclosed all material facts to the independent certified public accountant, and that the audited financial statement is a true and complete statement of the financial condition of the contractor.
- (7) "Management", when used herein, means the chief executive officers, partners, principals or other person or persons primarily responsible for the financial and operational policies and practices of the contractor.
- (8) Accounting terms, unless otherwise defined herein, shall have a meaning in accordance with generally accepted accounting principles and auditing standards.

(b) Subsection (a)(2) hereof notwithstanding, every agreement or contract awarded or executed pursuant to sections thirty-eight A 1/2 to thirty-eight O, inclusive, of chapter seven, or eleven C of chapter twenty-five A, and pursuant to section thirty-nine M of chapter thirty or to section forty-four A through H, inclusive, of chapter one hundred and forty-nine, shall provide that:

- (1) The contractor shall make, and keep for at least six years after final payment, books, records, and accounts which in reasonable detail accurately and fairly reflect the transactions and dispositions of the contractor, and
- (2) Until the expiration of six years after final payment, the office of inspector general, and the commissioner of capital asset management and maintenance shall have the right to examine any books, documents, papers or records of the contractor or of his subcontractors that directly pertain to, and involve transactions relating to, the contractor or his subcontractors, and
- (3) If the agreement is a contract as defined herein, the contractor shall describe any change in the method of maintaining records or recording transactions which materially affect any statements filed with the awarding authority, including in his description the date of the change and reasons therefor, and shall accompany said description with a letter from the contractor's independent certified public accountant approving or otherwise commenting on the changes, and
- (4) If the agreement is a contract as defined herein, the contractor has filed a statement of management on internal accounting controls as set forth in paragraph (c) below prior to the execution of the contract, and
- (5) If the agreement is a contract as defined herein, the contractor has filed prior to the execution of the contracts and will continue to file annually, an audited financial statement for the most recent completed fiscal year as set forth in paragraph (d) below.

(c) Every contractor awarded a contract shall file with the awarding authority a statement of management as to whether the system of internal accounting controls of the contractor and its subsidiaries reasonably assures that:

- (1) transactions are executed in accordance with management's general and specific authorization;
- (2) transactions are recorded as necessary
 - i. to permit preparation of financial statements in conformity with generally accepted accounting principles, and
 - ii. to maintain accountability for assets;
- (3) access to assets is permitted only in accordance with management's general or specific authorization; and
- (4) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

Every contractor awarded a contract shall also file with the awarding authority a statement prepared and signed by an independent certified public accountant, stating that he has examined the statement of management on internal accounting controls, and expressing an opinion as to:

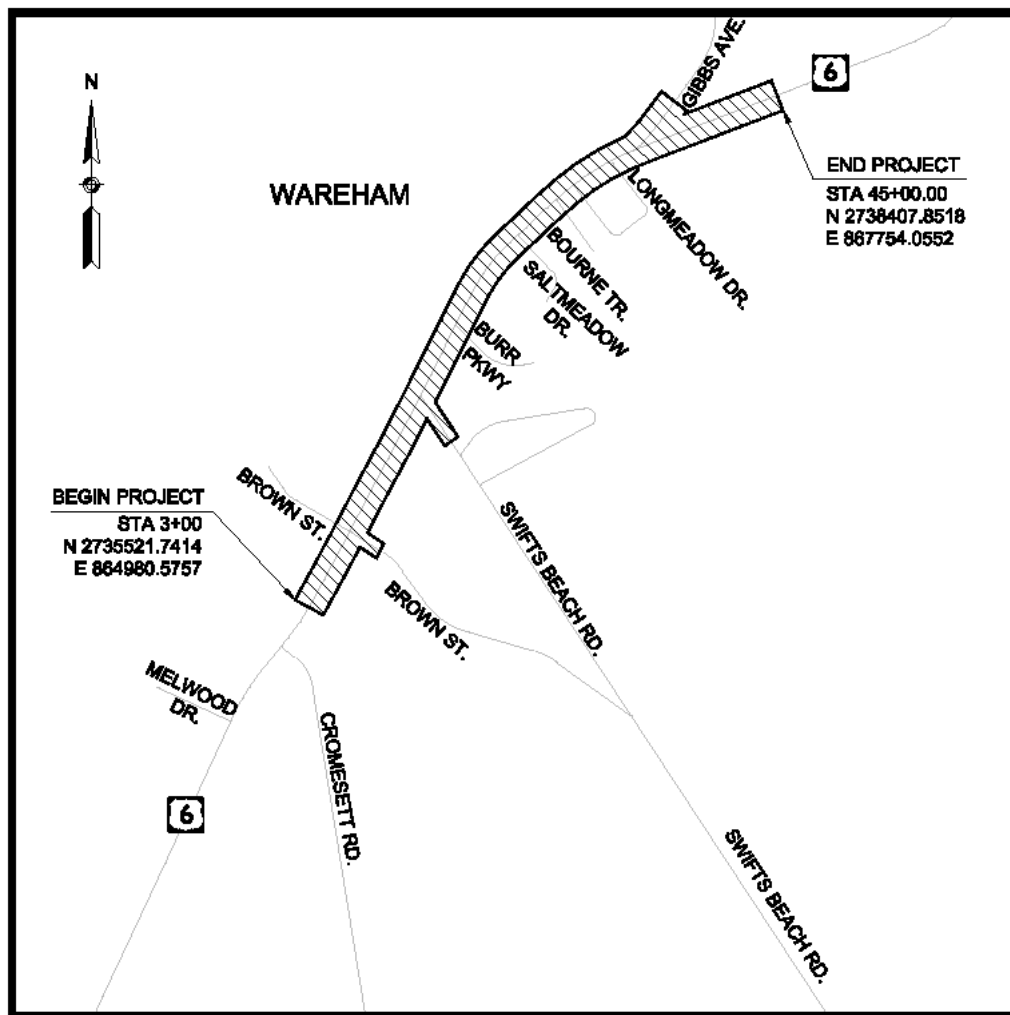
- (1) whether the representations of management in response to this paragraph and paragraph (b) above are consistent with the result of management's evaluation of the system of internal accounting controls; and
- (2) whether such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the applicant's financial statements.

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DOCUMENT 00331

LOCUS MAP**WAREHAM**

Federal Aid Project No. STP-0035(068)X
Corridor Improvements on Route 6 at Swifts Beach Road



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Final Report ☐Interim Report ☐**CONTRACTOR PROJECT EVALUATION FORM***For instructions on using this form, see Engineering Directive E-10-002, Dated 4/20/2010*

Date: _____

City/Town: _____

Contractor: _____

Project: _____

Address: _____

F.A. No. _____

Contract Number: _____

Bid Price: _____

Notice to Proceed: _____

Funds: State: _____ Fed Aid: _____

Current Contract Completion Date: _____

Date Work Started: _____

Date Work Completed*: _____

Contractor's Superintendent: _____

Division: (indicates class of work) Highway: _____ Bridge: _____ Maintenance: _____

*If work was NOT completed within specified time (including extensions) give reasons on following page.

	Excellent 10	Very Good 9	Average 8	7	Fair 6	5	Poor 4	% Rating
1. Workmanship								x 2=
2. Safety								x 2=
3. Schedule								x 1.5=
4. Home Office Support								x 1=
5. Subcontractors Performance								x 1=
6. Field Supervision/ Superintendent								x 1=
7. Contract Compliance								x 0.5=
8. Equipment								x 0.5=
9. Payment of Accounts								x 0.5=
(use back for additional comments)								
							Overall Rating:	

(Give explanation of items 1 through 9 on the following page in numerical order if overall rating is below 80%. Use additional sheets if necessary.)

District Construction Engineer's Signature/Date _____

Resident Engineer's Signature/Date _____

Contractor's Signature Acknowledging Report/Date _____

Contractor Requests Meeting with the District: No ☐Yes ☐

Date Meeting Held: _____

Contractor's Comments/Meeting Notes (extra sheets may be added to this form and noted here if needed): _____

CONTRACTOR PROJECT EVALUATION FORM (Continued)

Date: _____ Contract Number: _____

INFORMATION FOR DISTRICT HIGHWAY DIRECTORS RELATING TO PREQUALIFICATION

A deduction shall be recommended for unsatisfactory performance if computed overall rating is under 80%.

A deduction may be recommended for this project being completed late due to the Contractor's fault.

RECOMMENDATIONS FOR DEDUCTIONS FROM CONTRACTORS' ASSIGNED FACTOR

(Write Yes or No in space provided)

I recommend a deduction for Contractor's unsatisfactory performance: _____

I recommend a deduction for project completed late: _____

Signed: _____

District Highway Director

EXPLANATION OF RATINGS 1 – 9: _____

[illegible]

WORK NOT COMPLETED WITHIN SPECIFIED TIME: _____

Revised: 04/28/17

*** END OF DOCUMENT ***



DOCUMENT 00440

Final Report ☐Interim Report ☐**SUBCONTRACTOR PROJECT EVALUATION FORM***For instructions on using this form, see Engineering Directive E-10-002, Dated 4/20/2010*

Date: _____

City/Town: _____

Subcontractor: _____

Project: _____

Address: _____

F.A. No.: _____

Contract Number: _____

Prime Contractor _____

Current Contract Completion Date: _____

Date Work Started: _____

Date Work Completed*: _____

Subcontractor's Superintendent: _____

Type of Work Performed by Subcontractor: _____

*If work was NOT completed within specified time (including extensions) give reasons on following page.

	Excellent 10	Very Good 9	Average 8	7	Fair 6	5	Poor 4	% Rating
1. Workmanship								x 2=
2. Safety								x 2=
3. Schedule								x 1.5=
4. Home Office Support								x 1.5=
5. Field Supervision/ Superintendent								x 1=
6. Contract Compliance								x 1=
7. Equipment								x 0.5=
8. Payment of Accounts								x 0.5=
(use back for additional comments)							Overall Rating:	

(Give explanation of items 1 through 8 on the following page in numerical order if overall rating is below 80%. Use additional sheets if necessary.)

District Construction Engineer's Signature/Date _____

Resident Engineer's Signature/Date _____

Contractor Signature Acknowledging Report/Date _____

Subcontractor Signature Acknowledging Report/Date _____

Subcontractor Requests Meeting with the District: No ☐ Yes ☐ Date Meeting Held: _____

Subcontractor's Comments / Meeting Notes (extra sheets may be added to this form and noted here if needed): _____

Contractor's Comments: _____

DOCUMENT 00710
GENERAL CONTRACT PROVISIONS
Revised: 02-11-26

NOTICE OF AVAILABILITY

The STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES dated 2026, the 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS; the 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING and the CONSTRUCTION STANDARD DETAILS are available online at <https://www.mass.gov/massdot-highway-division-manuals-and-publications>

SPECIAL PROVISIONS FOR RIGHT-TO-KNOW ACT REQUIREMENTS

The Contractor's attention is directed to Massachusetts General Laws, Chapter 111F, commonly known as the Right-To-Know Act, and to the regulations promulgated pursuant thereto. Among the provisions of the Right-To-Know Act is a requirement that employers make available to employees Materials Safety Data Sheets (MSDS) for any substance on the Massachusetts Substance List (MSL) to which employees are, have been, or may be exposed.

To ensure prompt compliance with these regulations and legislation, the Contractor shall:

1. Deliver to the Department, prior to the start of any work under this contract, copies of MSDS for all MSL substances to be used, stored, processed or manufactured at the worksite by the Contractor.
2. Train employees of the Department, who may be exposed to MSL substances as a result of the Contractor's work under this contract, with regard to those specific substances in accordance with requirements of the Right-To-Know Act.
3. Observe all safety precautions recommended on the MSDS for any MSL substance to be used, stored, processed, or manufactured at the worksite by the Contractor.
4. Inform the Department in writing regarding specific protective equipment recommended in the MSDS for MSL substances to which employees of the Department may be exposed as a result of the Contractor's work under this contract.

The Department shall not be liable for any delay or suspension of work caused by the refusal of its employees to perform any work due to the Contractor's failure to comply with the Right-To-Know Act. The Contractor agrees to hold the Department or the Commissioner of the Department harmless and fully indemnified for any and all claims, demands, fines, actions, complaints, and causes of action resulting from or arising out of the Contractor's failure to comply with the requirements of the Right-To-Know Act.

ALTERNATIVE DISPUTE RESOLUTION

Forum, Choice of Law and Mediations:

Any actions arising out of a contract shall be governed by the laws of Massachusetts and shall be brought and maintained in a State or federal court in Massachusetts which shall have exclusive jurisdiction thereof. MassDOT and the Contractor may both agree to mediation of any claim and will share the costs of such mediation pro rata based on the number of parties involved.

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REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants /

Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:

The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. 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 classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must 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.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

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

(ii) The classification is used in the area by the construction industry; and

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

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must 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.

d. *Fringe benefits not expressed as an hourly rate.* 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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* 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, in accordance with the criteria set forth in § 5.28, 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.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, 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.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHDL/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working 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 CFR part 3](#); and

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

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

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, 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, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must 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, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

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

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. 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 watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* 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 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, 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 that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
 (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) 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 offense 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, 2 CFR 180.800;

(3) 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 (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. 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 Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of 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.

b. 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 Federal 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.

2. 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 31 U.S.C. 1352. 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.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

DOCUMENT 00811

SPECIAL PROVISIONS
MONTHLY PRICE ADJUSTMENT FOR HOT MIX ASPHALT (HMA) MIXTURES
Revised: 02/03/2023

This provision applies to all projects using greater than 100 tons of hot mix asphalt (HMA) mixtures containing liquid asphalt cement as stipulated in the Notice to Contractors section of the bid documents.

Price Adjustments will be based on the variance in price, for the liquid asphalt component only, between the Base Price and the Period Price. They shall not include transportation or other charges. Price Adjustments will occur on a monthly basis.

Base Price

The Base Price of liquid asphalt on a project as listed in the Notice to Contractors section of the bid documents is a fixed price determined by the Department at the time of the bid using the same method as the determination of the Period Price detailed below. The Base Price shall be used in all bids.

Period Price

The Period Price is the price of liquid asphalt for each monthly period as determined by the Department using the average selling price per standard ton of PG64-28 paving grade (primary binder classification) asphalt, FOB manufacturer's terminal, as listed under the "East Coast Market - New England, Boston, Massachusetts area" section of the Poten & Partners, Inc. "Asphalt Weekly Monitor". This average selling price is listed in the issue having a publication date of the second Friday of the month and will be posted as the Period Price for that month. The Department will post this Period Price on its website at <https://www.mass.gov/service-details/massdot-current-contract-price-adjustments> following its receipt of the relevant issue of the "Asphalt Weekly Monitor". Poten and Partners has granted the Department the right to publish this specific asphalt price information sourced from the Asphalt Weekly Monitor.

Price Adjustment Determination, Calculation and Payment

The Contract Price of the HMA mixture will be paid under the respective item in the Contract. Price Adjustments, as herein provided, either upwards or downwards, will be made after the work has been performed using the monthly period price for the month during which the work was performed.

Price Adjustments will be paid only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

The Price Adjustment applies only to the actual virgin liquid asphalt content in the mixture placed on the job in accordance with the approved Job Mix Formula.

Price Adjustments will be separate payment items. The pay item numbers are 999.401 for a positive price adjustment (a payment) and 999.402 for a negative price adjustment (a deduction). Price Adjustments will be calculated using the following equation:

Price Adjustment = Tons of HMA Placed X Liquid Asphalt Content % X RAP Factor X (Period Price - Base Price)

No Price Adjustment will be allowed beyond the Completion Date of this Contract, unless there is a Department-approved extension of time.

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DOCUMENT 00812

SPECIAL PROVISIONS
MONTHLY PRICE ADJUSTMENT FOR DIESEL FUEL AND GASOLINE –
ENGLISH UNITS
Revised: 02/01/2021

This monthly fuel price adjustment is inserted in this contract because the national and worldwide energy situation has made the future cost of fuel unpredictable. This adjustment will provide for either additional compensation to the Contractor or repayment to the Commonwealth, depending on an increase or decrease in the average price of diesel fuel or gasoline.

This adjustment will be based on fuel usage factors for various items of work developed by the Highway Research Board in Circular 158, dated July 1974. These factors will be multiplied by the quantities of work done in each item during each monthly period and further multiplied by the variance in price from the Base Price to the Period Price.

The Base Price of Diesel Fuel and Gasoline will be the price as indicated in the Department's web site <https://www.mass.gov/service-details/massdot-current-contract-price-adjustments> for the month in which the contract was bid, which includes State Tax.

The Period Price will be the average of prices charged to the State, including State Tax for the bulk purchases made during each month.

This adjustment will be effected only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

No adjustment will be paid for work done beyond the extended completion date of any contract.

Any adjustment (increase or decrease) to estimated quantities made to each item at the time of final payment will have the fuel price adjustment figured at the average period price for the entire term of the project for the difference of quantity.

The fuel price adjustment will apply only to the following items of work at the fuel factors shown:

ITEMS COVERED	FUEL FACTORS	
	Diesel	Gasoline
Excavation: and Borrow Work: Items 120, 120.1, 121, 123, 124, 125, 127, 129.3, 140, 140.1, 141, 142, 143, 144, 150, 150.1, 151 and 151.1 (Both Factors used)	0.29 Gallons / CY.	0.15 Gallons / CY
Surfacing Work: All Items containing Hot Mix Asphalt	2.90 Gallons / Ton	Does Not Apply

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DOCUMENT 00813

SPECIAL PROVISIONS

PRICE ADJUSTMENTS FOR STRUCTURAL STEEL AND REINFORCING STEEL

March 25, 2026

This special provision applies to all projects containing the use of structural steel and/or reinforcing steel as specified elsewhere in the Contract work. It applies to all structural steel and all reinforcing steel, as defined below, on the project. Compliance with this provision is mandatory, i.e., there are no “opt-in” or “opt-out” clauses. Price adjustments will be handled as described below and shall only apply to unfabricated reinforcing steel bars and unfabricated structural steel material, consisting of rolled shapes, plate steel, sheet piling, pipe piles, steel castings and steel forgings.

Price adjustments will be variances between Base Prices and Period Prices. Base Prices and Period Prices are defined below.

Price adjustments will only be made if the variances between Base Prices and Period Prices are 5% or more. A variance can result in the Period Price being either higher or lower than the Base Price. Once the 5% threshold has been achieved, the adjustment will apply to the full variance between the Base Price and the Period Price.

Price adjustments will be calculated by multiplying the number of pounds of unfabricated structural steel material or unfabricated reinforcing steel bars on a project by the index factor calculated as shown below under Example of a Period Price Calculation.

Price adjustments will not include guardrail panels or the costs of shop drawing preparation, handling, fabrication, coatings, transportation, storage, installation, profit, overhead, fuel costs, fuel surcharges, or other such charges not related to the cost of the unfabricated structural steel and unfabricated reinforcing steel.

The weight of steel subject to a price adjustment shall not exceed the final shipping weight of the fabricated part by more than 10%.

Base Prices and Period Prices are defined as follows:

Base Prices of unfabricated structural steel and unfabricated reinforcing steel on a project are fixed prices determined by the Department and found in the table below. While it is the intention of the Department to make this table comprehensive, some of a project’s unfabricated structural steel and/or unfabricated reinforcing steel may be inadvertently omitted. Should this occur, the Contractor shall bring the omission to the Department’s attention so that a contract alteration may be processed that adds the missing steel to the table and its price adjustments to the Contract.

The Base Price Date is the month and year of the most recent finalized period price index at the time that MassDOT opened bids for the project. The Base Price Index for this contract is the Steel PPI listed in the Notice to Contractors.

Period Prices of unfabricated structural steel and unfabricated reinforcing steel on a project are variable prices that have been calculated using the Period Price Date and an index of steel prices to adjust the Base Price.

The Period Price Date is the date the steel was delivered to the fabricator as evidenced by an official bill of lading submitted to the Department containing a description of the shipped materials, weights of the shipped materials and the date of shipment. This date is used to select the Period Price Index.

The index used for the calculation of Period Prices is the U.S. Department of Labor Bureau of Labor Statistics Producer Price Index (PPI) Series ID WPU101702 (Not Seasonally Adjusted, Group: Metals and Metal Products, Item: Semi-finished Steel Mill Products.) As this index is subject to revision for a period of up to four (4) months after its original publication, no price adjustments will be made until the index for the period is finalized, i.e., the index is no longer suffixed with a “(P)”.

Period Prices are determined as follows:

Period Price = Base Price X Index Factor

Index Factor = Period Price Index / Base Price Index

Example of a Period Price Calculation:

Calculate the Period Price for December 2009 using a Base Price from March 2009 of \$0.82/Pound for 1,000 Pounds of ASTM A709 (AASHTO M270) Grade A36 Structural Steel Plate.

The Period Price Date is December 2009. From the PPI website*, the Period Price Index = 218.0.

The Base Price Date is March 2009. From the PPI website*, the Base Price Index = 229.4.

Index Factor = Period Price Index / Base Price Index = $218.0 / 229.4 = 0.950$

Period Price = Base Price X Index Factor = $\$0.82/\text{Pound} \times 0.950 = \$0.78/\text{Pound}$

Since $\$0.82 - \$0.78 = \$0.04$ is less than 5% of \$0.82, no price adjustment is required.

If the \$0.04 difference shown above was greater than 5% of the Base Price, then the price adjustment would be 1,000 Pounds X \$0.04/Pound = \$40.00. Since the Period Price of \$0.78/Pound is less than the Base Price of \$0.82/Pound, indicating a drop in the price of steel between the bid and the delivery of material, a credit of \$40.00 would be owed to MassDOT. When the Period Price is higher than the Base Price, the price adjustment is owed to the Contractor.

* To access the PPI website and obtain a Base Price Index or a Period Price Index, go to

<http://data.bls.gov/cgi-bin/srgate>

End of example.

The Contractor will be paid for unfabricated structural steel and unfabricated reinforcing steel under the respective contract pay items for all components constructed of either structural steel or reinforced Portland cement concrete under their respective Contract Pay Items.

Price adjustments, as herein provided for, will be paid separately as follows:

Structural Steel

Pay Item Number 999.449 for positive (+) pay adjustments (payments to the Contractor)

Pay Item Number 999.457 for negative (-) pay adjustments (credits to MassDOT Highway Division)

Reinforcing Steel

Pay Item Number 999.466 for positive (+) pay adjustments (payments to the Contractor)

Pay Item Number 999.467 for negative (-) pay adjustments (credits to MassDOT Highway Division)

No price adjustment will be made for price changes after the Contract Completion Date, unless the MassDOT Highway Division has approved an extension of Contract Time for the Contract.

TABLE

Steel Type		Price per Pound
1	ASTM A615/A615M Grade 60 (AASHTO M31 Grade 60 or 420) Reinforcing Steel	\$0.56
2	ASTM A27 (AASHTO M103) Steel Castings, H-Pile Points & Pipe Pile Shoes (See Note below.)	\$0.78
3	ASTM A668 / A668M (AASHTO M102) Steel Forgings	\$0.78
4	ASTM A108 (AASHTO M169) Steel Forgings for Shear Studs	\$0.80
5	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Plate	\$0.84
6	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Shapes	\$0.79
7	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Plate	\$0.84
8	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Shapes	\$0.79
9	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Plate	\$0.87
10	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Shapes	\$0.80
11	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W 345W Structural Steel Plate	\$0.87
12	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W or 345W Structural Steel Shapes	\$0.80
13	ASTM A709/A709M Grade HPS 50W / AASHTO M270M/M270 Grade HPS 50W or 345W Structural Steel Plate	\$0.91
14	ASTM A709/A709M Grade HPS 70W / AASHTO M270M/M270 Grade HPS 70W or 485W Structural Steel Plate	\$0.98
15	ASTM A514/A514M-05 Grade HPS 100W / AASHTO M270M/M270 Grade HPS 100W or 690W Structural Steel Plate	\$1.50
16	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Plate	\$0.87
17	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Shapes	\$0.80
18	ASTM A276 Type 316 Stainless Steel	\$4.51
19	ASTM A240 Type 316 Stainless Steel	\$4.51
20	ASTM A148 Grade 80/50 Steel Castings (See Note below.)	\$1.55
21	ASTM A53 Grade B Structural Steel Pipe	\$0.98
22	ASTM A500 Grades A, B, 36 & 50 Structural Steel Pipe	\$0.98
23	ASTM A252, Grades 240 (36 KSI) & 414 (60 KSI) Pipe Pile	\$0.78
24	ASTM 252, Grade 2 Permanent Steel Casing	\$0.78
25	ASTM A36 (AASHTO M183) for H-piles, steel supports and sign supports	\$0.82
26	ASTM A328 / A328M, Grade 50 (AASHTO M202) Steel Sheetpiling	\$1.48
27	ASTM A572 / A572M, Grade 50 Sheetpiling	\$1.48
28	ASTM A36/36M, Grade 50	\$0.84
29	ASTM A570, Grade 50	\$0.82
30	ASTM A572 (AASHTO M223), Grade 50 H-Piles	\$0.84
31	ASTM A1085 Grade A (50 KSI) Steel Hollow Structural Sections (HSS), heat-treated per ASTM A1085 Supplement S1	\$0.98
32	AREA 140 LB Rail and Track Accessories	\$0.51

NOTE: Steel Castings are generally used only on moveable bridges. Cast iron frames, grates and pipe are not "steel" castings and will not be considered for price adjustments.

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DOCUMENT 00814

SPECIAL PROVISIONS
PRICE ADJUSTMENT FOR PORTLAND CEMENT CONCRETE MIXES

January 12, 2009

This provision applies to all projects using greater than 100 Cubic Yards (76 Cubic Meters) of Portland cement concrete containing Portland cement as stipulated in the Notice to Contractors section of the Bid Documents. This Price Adjustment will occur on a monthly basis.

The Price Adjustment will be based on the variance in price for the Portland cement component only from the Base Price to the Period Price. It shall not include transportation or other charges.

The Base Price of Portland cement on a project is a fixed price determined at the time of bid by the Department by using the same method as for the determination of the Period Price (see below) and found in the Notice to Contractors.

The Period Price of Portland cement will be determined by using the latest published price, in dollars per ton (U.S.), for Portland cement (Type I) quoted for Boston, U.S.A. in the **Construction Economics** section of *ENR Engineering News-Record* magazine or at the ENR website <http://www.enr.com> under **Construction Economics**. The Period Price will be posted on the MassDOT website the Wednesday immediately following the publishing of the monthly price in ENR, which is normally the first week of the month.

The Contract Price of the Portland cement concrete mix will be paid under the respective item in the Contract. The price adjustment, as herein provided, upwards or downwards, will be made after the work has been performed, using the monthly period price for the month during which the work was performed.

The price adjustment applies only to the actual Portland cement content in the mix placed on the job in accordance with the Standard Specifications for Highways and Bridges, Division III, Section M4.02.01. No adjustments will be made for any cement replacement materials such as fly ash or ground granulated blast furnace slag.

The Price Adjustment will be a separate payment item. It will be determined by multiplying the number of cubic yards of Portland cement concrete placed during each monthly period times the Portland cement content percentage times the variance in price between the Base Price and Period Price of Portland cement.

This Price Adjustment will be paid only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

No Price Adjustment will be allowed beyond the Completion Date of this Contract, unless there is a Department-approved extension of time.

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DOCUMENT 00820

**THE COMMONWEALTH OF MASSACHUSETTS
SUPPLEMENTAL EQUAL EMPLOYMENT OPPORTUNITY,
NON-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM**

I. Definitions

For purposes of this contract,

"Minority" means a person who meets one or more of the following definitions:

- (a) American Indian or Native American means: all persons having origins in any of the original peoples of North America and who are recognized as an Indian by a tribe or tribal organization.
- (b) Asian means: All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian sub-continent, or the Pacific Islands, including, but Not limited to China, Japan, Korea, Samoa, India, and the Philippine Islands.
- (c) Black means: All persons having origins in any of the Black racial groups of Africa, including, but not limited to, African-Americans, and all persons having origins in any of the original peoples of the Cape Verdean Islands.
- (d) Eskimo or Aleut means: All persons having origins in any of the peoples of Northern Canada, Greenland, Alaska, and Eastern Siberia.
- (e) Hispanic means: All persons having their origins in any of the Spanish-speaking peoples of Mexico, Puerto Rico, Cuba, Central or South America, or the Caribbean Islands.

"State construction contract" means a contract for the construction, reconstruction, installation, demolition, maintenance or repair of a building or capital facility, or a contract for the construction, reconstruction, alteration, remodeling or repair of a public work undertaken by a department, agency, board, or commission of the commonwealth.

"State assisted construction contract" means a contract for the construction, reconstruction, installation, demolition, maintenance or repair of a building or capital facility undertaken by a political subdivision of the commonwealth, or two or more political subdivisions thereof, an authority, or other instrumentality and whose costs of the contract are paid for, reimbursed, grant funded, or otherwise supported, in whole or in part, by the commonwealth.

II. Equal Opportunity, Non-Discrimination and Affirmative Action

During the performance of this Contract, the Contractor and all subcontractors (hereinafter collectively referred to as "the Contractor") for a state construction contract or a state assisted construction contract, for him/herself, his/her assignees and successors in interest, agree to comply with all applicable equal employment opportunity, non-discrimination and affirmative action requirements, including but not limited to the following:

In connection with the performance of work under this contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability, shall not discriminate in the selection or retention of subcontractors, and shall not discriminate in the procurement of materials and rentals of equipment.

The aforesaid provision shall include, but not be limited to, the following: employment upgrading, demotion, or transfer; recruitment advertising, layoff or termination; rates of pay or other forms of compensation; conditions or privileges of employment; and selection for apprenticeship or on-the-job training opportunity. The Contractor shall comply with the provisions of chapter 151B of the Massachusetts General Laws, as amended, and all other applicable anti-discrimination and equal opportunity laws, all of which are herein incorporated by reference and made a part of this Contract.

The Contractor shall post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Massachusetts Commission Against Discrimination setting forth the provisions of the Fair Employment Practices Law of the Commonwealth (Massachusetts General Laws Chapter 151 B).

In connection with the performance of work under this contract, the Contractor shall undertake, in good faith, affirmative action measures to eliminate any discriminatory barriers in the terms and conditions of employment on the grounds of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability. Such affirmative action measures shall entail positive and aggressive measures to ensure nondiscrimination and to promote equal opportunity in the areas of hiring, upgrading, demotion or transfer, recruitment, layoff or termination, rate of compensation, apprenticeship and on-the-job training programs. A list of positive and aggressive measures shall include, but not be limited to, advertising employment opportunities in minority and other community news media; notifying minority, women and other community-based organizations of employment opportunities; validating all job specifications, selection requirements, and tests; maintaining a file of names and addresses of each worker referred to the Contractor and what action was taken concerning such worker; and notifying the administering agency in writing when a union with whom the Contractor has a collective bargaining agreement has failed to refer a minority or woman worker. These and other affirmative action measures shall include all actions required to guarantee equal employment opportunity for all persons, regardless of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability. One purpose of this provision is to ensure to the fullest extent possible an adequate supply of skilled tradesmen for this and future Commonwealth public construction projects.

III. Minority and Women Workforce Participation

Pursuant to his/her obligations under the preceding section, the Contractor shall strive to achieve on this project the labor participation goals contained herein. Said participation goals shall apply in each job category on this project including but not limited to bricklayers, carpenters, cement masons, electricians, ironworkers, operating engineers and those classes of work enumerated in Section 44F of Chapter 149 of the Massachusetts General Laws. The participation goals for this project shall be 15.3% for minorities and 6.9% for women. The participation goals, as set forth herein, shall not be construed as quotas or set-asides; rather, such participation goals will be used to measure the progress of the Commonwealth's equal opportunity, non-discrimination and affirmative action program. Additionally, the participation goals contained herein should not be seen or treated as a floor or as a ceiling for the employment of particular individuals or group of individuals.

IV. Liaison Committee

At the discretion of the agency that administers the contract for the construction project there may be established for the life of the contract a body to be known as the Liaison Committee. The Liaison Committee shall be composed of one representative each from the agency or agencies administering the contract for the construction project, hereinafter called the administering agency, a representative from the Office of Affirmative action, and such other representatives as may be designated by the administering agency. The Contractor (or his/her agent, if any, designated by him/her as the on-site equal employment opportunity officer) shall recognize the Liaison Committee as an affirmative action body, and shall establish a continuing working relationship with the Liaison Committee, consulting with the Liaison Committee on all matters related to minority recruitment, referral, employment and training.

V. Reports and Records

The Contractor shall prepare projected workforce tables on a quarterly basis when required by the administering agency. These shall be broken down into projections, by week, of workers required in each trade. Copies shall be furnished one week in advance of the commencement of the period covered, and also, when updated, to the administering agency and the Liaison Committee when required.

The Contractor shall prepare weekly reports in a form approved by the administering agency, unless information required is required to be reported electronically by the administering agency, the number of hours worked in each trade by each employee, identified as woman, minority, or non-minority. Copies of these shall be provided at the end of each such week to the administering agency and the Liaison Committee.

Records of employment referral orders, prepared by the Contractor, shall be made available to the administering agency on request.

The Contractor will provide all information and reports required by the administering agency on instructions issued by the administering agency and will permit access to its facilities and any books, records, accounts and other sources of information which may be determined by the administering agency to effect the employment of personnel. This provision shall apply only to information pertinent to the Commonwealth's supplementary non-discrimination, equal opportunity and access and opportunity contract requirements. Where information required is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the administering agency and shall set forth what efforts he has made to obtain the information.

VI. Access to Work Site

A designee of the administering agency and a designee of the Liaison Committee shall each have a right to access the work site.

VII. Solicitations for Subcontracts, and for the Procurement of Materials and Equipment

In all solicitations either by competitive bidding or negotiation made by the Contractor either for work to be performed under a subcontract or for the procurement of materials or equipment, each potential subcontractor or supplier shall be notified in writing by the Contractor of the Contractor's obligations under this contract relative to non-discrimination and equal opportunity.

VIII. Sanctions

Whenever the administering agency believes the General or Prime Contractor or any subcontractor may not be operating in compliance with the provisions of the Fair Employment Practices Law of the Commonwealth (Massachusetts General Laws Chapter 151B), the administering agency may refer the matter to the Massachusetts Commission Against Discrimination ("Commission") for investigation.

Following the referral of a matter by the administering agency to the Massachusetts Commission Against Discrimination, and while the matter is pending before the MCAD, the administering agency may withhold payments from contractors and subcontractors when it has documentation that the contractor or subcontractor has violated the Fair Employment Practices Law with respect to its activities on the Project, or if the administering agency determines that the contractor has materially failed to comply with its obligations and the requirements of this Section. The amount withheld shall not exceed a withhold of payment to the General or Prime Contractor of 1/100 or 1% of the contract award price or \$5,000, whichever sum is greater, or, if a subcontractor is in non-compliance, a withhold by the administering agency from the General Contractor, to be assessed by the General Contractor as a charge against the subcontractor, of 1/100 or 1% of the subcontractor price, or \$1,000 whichever sum is greater, for each violation of the applicable law or contract requirements. The total withheld from anyone General or Prime Contractor or subcontractor on a Project shall not exceed \$20,000 overall. No withhold of payments or investigation by the Commission or its agent shall be initiated without the administering agency providing prior notice to the Contractor.

If, after investigation, the Massachusetts Commission Against Discrimination finds that a General or Prime Contractor or subcontractor, in commission of a state construction contract or state-assisted construction contract, violated the provisions of the Fair Employment Practices Law, the administering agency may convert the amount withheld as set forth above into a permanent sanction, as a permanent deduct from payments to the General or Prime Contractor or subcontractor, which sanction will be in addition to any such sanctions, fines or penalties imposed by the Massachusetts Commission Against Discrimination.

No sanction enumerated under this Section shall be imposed by the administering agency except after notice to the General or Prime Contractor or subcontractor and an adjudicatory proceeding, as that term is used, under Massachusetts General Laws Chapter 30A, has been conducted.

IX. Severability

The provisions of this section are severable, and if any of these provisions shall be held unconstitutional by any court of competent jurisdiction, the decision of such court shall not affect or impair any of the remaining provisions.

X. Contractor's Certification

After award and prior to the execution of any contract for a state construction contract or a state assisted construction contract, the Prime or General Contractor shall certify that it will comply with all provisions of this Document 00820 Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program, by executing Document 00859 Contractor/Subcontractor Certification Form.

XI. Subcontractor Requirements

Prior to the award of any subcontract for a state construction contract or a state assisted construction contract, the Prime or General Contractor shall provide all prospective subcontractors with a complete copy of this Document 00820 entitled "Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program" and will incorporate the provisions of this Document 00820 into any and all contracts or work orders for all subcontractors providing work on the Project. In order to ensure that the said subcontractor's certification becomes a part of all subcontracts under the prime contract, the Prime or General Contractor shall certify in writing to the administering agency that it has complied with the requirements as set forth in the preceeding paragraph by executing Document 00859 Contractor/Subcontractor Certification Form.

Rev'd 03/07/14

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DOCUMENT 00821

ELECTRONIC REPORTING REQUIREMENTS
CIVIL RIGHTS PROGRAMS AND CERTIFIED PAYROLL

Implemented on March 2, 2009

Revised June 04, 2019

The Massachusetts Department Of Transportation (MassDOT) has replaced the CHAMP reporting system with Equitable Business Opportunity Solution (EBO), a new web-based civil rights reporting software system. This system is capable of handling both civil rights reporting requirements and certified payrolls. The program's functions include the administration of Equal Employment Opportunity (EEO) requirements, On-The-Job Training requirements (OJT), Disadvantage Business Enterprise (DBE) and/or Minority / Women's Business Enterprise (M/WBE) subcontracting requirements, and the electronic collection of certified payrolls associated with MassDOT projects. In addition, this system is used to generate various data required as part of the American Recovery and Reinvestment Act (ARRA). Contractors are responsible for all coordination with all sub-contractors to ensure timely and accurate electronic submission of all required data.

Contractor and Sub-Contractor EBO User Certification

All contractors and sub-contractors must use the EBO software system. The software vendor, Internet Government Solutions (IGS), has developed an online EBO Training Module that is available to contractors and sub-contractors. This module is a self-tutorial which allows all users in the company to access the training, complete the tutorial, and become certified as EBO users for a one time fee of \$75.00. This is the only cost to contractors and sub-contractors associated with the EBO software system. The online EBO Training Module can be accessed at www.ebotraining.com. Click the "Register My Company" button on the login page to begin your training registration. Questions regarding EBO online training should be directed to Gerry Anguilano, IGS at (440) 238-1684.

MassDOT will track contractors and sub-contractors who have successfully completed the on-line training module. All persons performing civil rights program and/or certified payroll functions should be EBO certified.

Vetting of Firms and Designated Firm Individuals

Contractors must authorize a Primary Log-In ID Holder who has completed EBO on-line training to have access to the EBO system by completing and submitting the "Request For EBO System Log-In/Password Form" located on the MassDOT website at: <https://www.mass.gov/how-to/how-to-get-an-ebo-login>. Contractors must also agree to comply with the EBO system user agreement located on the MassDOT website.

All subcontracts entered into on a project must include language that identifies the submission and training requirements that the sub-contractor must perform. Sub-contractors will be approved by the respective District Office of MassDOT through the existing approval process. When new sub-contractors, who have not previously worked for MassDOT, are initially selected by a general contractor, the new sub-contractor must be approved by the District before taking the EBO on-line training module.

Interim Reporting Requirements

Until MassDOT is satisfied that the EBO system is fully operational and functioning as designed, contractors and sub-contractors will be required to submit certified payrolls manually. There will be a transition period where dual reporting, through manual and electronic submission, will be required. MassDOT, however, will notify contractors and sub-contractors when they may cease manual submission of certified payrolls.

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DOCUMENT 00859

CONTRACTOR/SUBCONTRACTOR CERTIFICATION FORM ‡*The contractor shall submit this completed document 00859 to MassDOT for each subcontract.*_____
(Contractor) Date: __________
(Subcontractor) ☐ District Approved SubcontractorContract No: 133932 Project No. 610647 Federal Aid No.: STP-0035(068)XLocation: WAREHAMProject Description: FAP No. STP-0035(068)X Corridor Improvements on Route 6 at Swifts Beach Road

PART 1 CONTRACTOR CERTIFICATION: I hereby certify, as an authorized official of this company, that to the best of my knowledge, information and belief, the company is in compliance with all applicable federal and state laws, rules, and regulations governing fair labor and employment practices, that the company will not discriminate in their employment practices, that the company will make good faith efforts to comply with the minority employee and women employee workforce participation ratio goals and specific affirmative action steps contained in Contract Document 00820 The Commonwealth of Massachusetts Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program, and that the company will comply with the special provisions and documentation indicated below (as checked).

I further hereby certify, as an authorized official of this company, that the special provisions and documentation indicated below (as checked) have been or are included in, and made part of, the Subcontractor Agreement entered into with the firm named above.

☐ **This is not a Federally-aided construction project****Document #**

- ☐ 00718 –Participation By Minority Or Women's Business Enterprises and SDVOBE†
- ☐ 00761 –Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion
- ☐ 00820 – MA Supplemental Equal Employment Opportunity, Non-Discrimination, and Affirmative Action Program
- ☐ 00821 – Electronic Reporting Requirements, Civil Rights Programs, and Certified Payroll
- ☐ 00859 – Contractor/Subcontractor Certification Form (this document)
- ☐ 00860 – MA Employment Laws
- ☐ 00861 – Applicable State Wage Rates in the Contract Proposal**
- ☐ B00842 – MA Schedule of Participation By Minority or Women Business Enterprises (M/WBEs)†
- ☐ B00843 – MA Letter of Intent – M/WBEs†
 - ** Does not apply to Material Suppliers, unless performing work on-site
 - † Applies only if Subcontractor is a M/WBE; only include these forms for the particular M/WBE Entity
- ☐ B00844 - Schedule of Participation By SDVOBE
- ☐ B00845 - Letter of Intent – SDVOBE
- ☐ B00846 – M/WBE or SDVOBE Joint Check Arrangement Approval Form
- ☐ B00847 – Joint Venture Affidavit

☐ **This is a Federally-aided construction project (Federal Aid Number is present)****Document #**

- ☐ 00719 – Special Provisions for Participation by Disadvantaged Business Enterprises†
- ☐ 00760 - Form FHWA 1273 - Required Contract Provisions for Federal-Aid Construction Contracts
- ☐ 00820 – MA Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program
- ☐ 00821 – Electronic Reporting Requirements, Civil Rights Programs and Certified Payroll
- ☐ 00859 – Contractor/Subcontractor Certification Form (this document)
- ☐ 00860 – MA Employment Laws
- ☐ 00870 – Standard Federal Equal Employment Opportunity Construction Contract Specifications Executive Order 11246, (41 CFR Parts 60-4.2 and 60-4.3 (Solicitations and Equal Opportunity Clauses))*
- ☐ 00875 – Federal Trainee Special Provisions

- ☐ B00853 – Schedule of Participation by Disadvantaged Business Enterprise†
☐ B00854 – Letter of Intent – DBEs†
☐ B00855 – DBE Joint Check Arrangement Approval Form
☐ B00856 – Joint Venture Affidavit
☐ 00861/00880 - Applicable state and federal wage rates from Contract Proposal**

*Applicable only to Contracts or Subcontracts in excess of \$10,000

**Does not apply to Material Suppliers, unless performing work on-site

† Applies only if Subcontractor is a DBE; only include these forms for the particular DBE Entity

Signed this _____ Day of _____, 20____ Under The Pains And Penalties Of Perjury.

 (Print Name and Title)

 (Authorized Signature)

PART 2

PART 2 SUBCONTRACTOR CERTIFICATION: I hereby certify, as an authorized official of this company, that the required documents in Part 1 above were physically incorporated in our Agreement/Subcontract with the Contractor and give assurance that this company will fully comply or make every good faith effort to comply with the same. I further certify that:

1. This company recognizes that if this is a Federal-Aid Project, then this Contract is covered by the equal employment opportunity laws administered and enforced by the United States Department of Labor (“USDOL”), Office of Federal Contract Compliance Programs (“OFCCP”). By signing below, we acknowledge that this company has certain reporting obligations to the OFCCP, as specified by 41 CFR Part 60-4.2.
2. This company further acknowledges that any contractor with fifty (50) or more employees on a Federal-aid Contract with a value of fifty-thousand (\$50,000) dollars or more must annually file an EEO-1 Report (SF 100) to the EEOC, Joint Reporting Committee, on or before September 30th, each year, as specified by 41 CFR Part 60-1.7a.
3. For more information regarding the federal reporting requirements, please contact the USDOL, OFCCP Regional Office, at 1-646-264-3170 or EEO-1, Joint Reporting Committee at 1-866-286-6440.
4. This company ☐ has, ☐ has not, participated in a previous contract or subcontract subject to the Equal Opportunity clauses set forth in 41 CFR Part 60-4 and Executive Order 11246, and where required, has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs or the EEO Commission all reports due under the applicable filing requirements.
5. This company is in full compliance with applicable Federal and Commonwealth of Massachusetts laws, rules, and regulations and is not currently debarred or disqualified from bidding on or participating in construction contracts in any jurisdiction of the United States. See : <https://www.mass.gov/service-details/contractors-and-vendors-suspended-or-debarred-by-massdot>
6. This company is properly registered and in good standing with the Office of the Secretary of the Commonwealth.

Signed this _____ Day of _____, 20____, Under The Pains And Penalties Of Perjury.

Firm: _____

Address: _____

 (Print Name and Title)

Telephone Number: _____

Federal I.D. Number: _____

 (Authorized Signature)

Estimated Start Date: _____

Estimated Completion Date: _____

Estimated Dollar Amount: _____

 (Date)

DOCUMENT 00860

COMMONWEALTH OF MASSACHUSETTS PUBLIC EMPLOYMENT LAWS

Revised February 20, 2019

The Contractor's attention is directed to Massachusetts General Laws, Chapter 149, Sections 26 through 27H, and 150A. This contract is considered to fall within the ambit of that law, which provides that in general, the Prevailing Rate or Total Rate must be paid to employees working on projects funded by the Commonwealth of Massachusetts or any political subdivision including Massachusetts Department of Transportation (MassDOT).

A Federal Aid project is also subject to the Federal Minimum Wage Rate law for construction. When comparing a state minimum wage rate, monitored by the Massachusetts Attorney General, versus federal minimum wage rate, monitored by the U.S. Department of Labor Wage and Hour Division, for a particular job classification the higher wage is at all times to be paid to the affected employee.

Every contractor or subcontractor engaged in this contract to which sections twenty-seven and twenty-seven A apply will keep a true and accurate record of all mechanics and apprentices, teamsters, chauffeurs and laborers employed thereon, showing the name, address and occupational classification of each such employee on this contract, and the hours worked by, and the wages paid to, each such employee, and shall furnish to the MassDOT's Resident Engineer, on a weekly basis, a copy of said record, in a form approved by MassDOT and in accordance with M.G.L. c. 149, § 27B, signed by the employer or his/her authorized agent under the penalties of perjury.

Each such contractor or subcontractor shall preserve its payroll records for a period of three years from the date of completion of the contract.

The Prevailing Wage Rate generally includes the following:

Minimum Hourly Wage + Employer Contributions to Benefit Plans = Prevailing Wage Rate or Total Rate

Any employer who does not make contributions to Benefit Plans must pay the total Prevailing Wage Rate directly to the employee.

Any deduction from the Prevailing Wage Rate or Total Rate for contributions to benefit plans can only be for a Health & Welfare, Pension, or Supplementary Unemployment plan meeting the requirements of the Employee Retirement Income Security Act (ERISA) of 1974. The maximum allowable deduction for these benefits from the prevailing wage rate cannot be greater than the amount allowed by Executive Office of Labor (EOL) for the specified benefits. Any additional expense of providing benefits to the employees is to be borne by the employer and cannot be deducted from the Minimum Hourly Wage. If the employer's benefit expense is less than that so provided by EOL the difference will be paid directly to the employee. The rate established must be paid to all employees who perform work on the project.

When an employer makes deductions from the Minimum Hourly Wage for an employee's contribution to social security, state taxes, federal taxes, and/or other contribution programs, allowed by law, the employer shall furnish each employee a suitable pay slip, check stub or envelope notifying the employee of the amount of the deductions.

No contractor or subcontractor contracting for any part of the contract week shall require or permit any laborer or mechanic to be employed on such work in excess of forty hours in any workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of forty hours in such workweek, whichever is the greater number of overtime hours.

Apprentice Rates are permitted only when there is an Apprentice Agreement registered with the Massachusetts Division of Apprentice Training in accordance with M.G.L. c. 23, § 11E-11L.

The Prevailing Wage Rates issued for each project shall be the rates paid for the entire project. The Prevailing Wage Rates must be posted on the job site at all times and be visible from a public way.

In addition, each such contractor and subcontractor shall furnish to the MassDOT's Resident Engineer, within fifteen days after completion of its portion of the work, a statement, executed by the contractor or subcontractor or by any authorized officer or employee of the contractor or subcontractor who supervises the payment of wages, in the following form:

STATEMENT OF COMPLIANCE

Date: _____

I, _____ do hereby state:
(Name of signatory party) (Title)

That I pay or supervise the payment of the persons employed by:

(Contractor or Subcontractor)

on the _____
(MassDOT Project Location and Contract Number)

and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty-nine of the General Laws.

Signature _____

Title _____

The above-mentioned copies of payroll records and statements of compliance shall be available for inspection by any interested party filing a written request to the MassDOT's Resident Engineer for such inspection and copying.

Massachusetts General Laws c. 149, §27, requires annual updates to prevailing wage schedules for all public construction contracts lasting longer than one year. MassDOT will request the required updates and furnish them to the Contractor. The Contractor is required to pay no less than the wage rates indicated on the annual updated wage schedules.

MassDOT will request the updates no later than two weeks before the anniversary of the Notice to Proceed date of the contract to allow for adequate processing by the Department of Labor Standards (DLS). The effective date for the new rates will be the anniversary date of the contract (i.e. the notice to proceed date), regardless of the date of issuance on the schedule from DLS.

All bidders are cautioned that the aforementioned laws require that employers pay to covered employees no less than the applicable minimum wages. In addition, the same laws require that the applicable prevailing wages become incorporated as part of this contract. The prevailing minimum wage law establishes serious civil and criminal penalties for violations, including imprisonment and exclusion from future public contracts. Bidders are cautioned to carefully read the relevant sections of the Massachusetts General Laws.

*** END OF DOCUMENT ***

DOCUMENT 00861

STATE PREVAILING WAGE RATES

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**THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS
Prevailing Wage Rates**

MAURA HEALEY
Governor

KIM DRISCOLL
Lt. Governor

**As determined by the Director under the provisions of the
Massachusetts General Laws, Chapter 149, Sections 26 to 27H**

LAUREN JONES
Secretary
MICHAEL FLANAGAN
Director

Awarding Authority:	Massachusetts Highway	City/Town:	WAREHAM
Contract Number:	133932		
Description of Work:	WAREHAM: FAP No. STP-0035(068)X Corridor Improvements on Route 6 at Swifts Beach Road		
Job Location:	Route 6 at Swifts Road Beach		

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, the awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. The updated wage schedule must be provided to all contractors, including general and sub-contractors, working on the construction project.
- This annual update requirement is generally not applicable to 27F "rental of equipment" contracts. For such contracts, the prevailing wage rates issued by DLS shall remain in effect for the duration of the contract term. However, if the prevailing wage rate sheet issued does not contain wage rates for each year covered by the contract term, the Awarding Authority must request updated rate sheets from DLS and provide them to the contractor to ensure the correct rates are being paid throughout the duration of the contract. Additionally, if an Awarding Authority exercises an option to renew or extend the contract term, they must request updated rate sheets from DLS and provide them to the contractor.
- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the "Wage Request Number" on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or a sub-contractor.
- Apprentices working on the project are required to be registered with the Massachusetts Division of Apprentice Standards (DAS). Apprentices must keep their apprentice identification card on their persons during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. **Any apprentice not registered with DAS regardless of whether they are registered with another federal, state, local, or private agency must be paid the journeyworker's rate.**
- Every contractor or subcontractor working on the construction project must submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee's name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. For a sample payroll reporting form go to <http://www.mass.gov/dols/pw>.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Contractors must obtain the wage schedules from awarding authorities. Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and criminal penalties.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may file a complaint with the Fair Labor Division of the office of the Attorney General at (617) 727-3465.

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
(2 AXLE) DRIVER - EQUIPMENT	1/1/2026	\$40.95	\$16.17	\$21.78	\$0.00	\$0.00	\$78.90
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	\$41.95	\$16.17	\$21.78	\$0.00	\$0.00	\$79.90
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	\$41.95	\$16.17	\$23.52	\$0.00	\$0.00	\$81.64
	1/1/2027	\$41.95	\$16.77	\$23.52	\$0.00	\$0.00	\$82.24
(3 AXLE) DRIVER - EQUIPMENT	1/1/2026	\$41.02	\$16.17	\$21.78	\$0.00	\$0.00	\$78.97
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	\$42.02	\$16.17	\$21.78	\$0.00	\$0.00	\$79.97
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	\$42.02	\$16.17	\$23.52	\$0.00	\$0.00	\$81.71
	1/1/2027	\$42.02	\$16.77	\$23.52	\$0.00	\$0.00	\$82.31
(4 & 5 AXLE) DRIVER - EQUIPMENT	1/1/2026	\$41.14	\$16.17	\$21.78	\$0.00	\$0.00	\$79.09
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	\$42.14	\$16.17	\$21.78	\$0.00	\$0.00	\$80.09
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	\$42.14	\$16.17	\$23.52	\$0.00	\$0.00	\$81.83
	1/1/2027	\$42.14	\$16.77	\$23.52	\$0.00	\$0.00	\$82.43
ADS/SUBMERSIBLE PILOT	1/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
For apprentice rates see "Apprentice- PILE DRIVER"							
AIR TRACK OPERATOR	12/1/2025	\$41.22	\$10.65	\$9.75	\$9.11	\$0.00	\$70.73
LABORERS	6/1/2026	\$42.66	\$10.65	\$9.75	\$9.11	\$0.00	\$72.17
LABORERS - ZONE 2	12/1/2026	\$44.10	\$10.65	\$9.75	\$9.11	\$0.00	\$73.61
	6/1/2027	\$45.55	\$10.65	\$9.75	\$9.11	\$0.00	\$75.06
	12/1/2027	\$47.00	\$10.65	\$9.75	\$9.11	\$0.00	\$76.51
	6/1/2028	\$48.50	\$10.65	\$9.75	\$9.11	\$0.00	\$78.01
	12/1/2028	\$50.00	\$10.65	\$9.75	\$9.11	\$0.00	\$79.51
For apprentice rates see "Apprentice- LABORER"							
AIR TRACK OPERATOR (HEAVY & HIGHWAY)	12/1/2025	\$41.22	\$10.65	\$9.75	\$9.21	\$0.00	\$70.83
LABORERS	6/1/2026	\$42.66	\$10.65	\$9.75	\$9.21	\$0.00	\$72.27
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.10	\$10.65	\$9.75	\$9.21	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
ASBESTOS WORKER (PIPES & TANKS)	12/1/2025	\$44.80	\$14.50	\$4.30	\$6.75	\$0.00	\$70.35
HEAT & FROST INSULATORS LOCAL 6							
HEAT & FROST INSULATORS LOCAL 6 (SOUTHERN MASS)							
ASPHALT RAKER	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
ASPHALT RAKER (HEAVY & HIGHWAY)	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	12/1/2025	\$58.68	\$16.55	\$13.35	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.98	\$16.55	\$13.35	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.43	\$16.55	\$13.35	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BACKHOE/FRONT-END LOADER	12/1/2025	\$58.68	\$16.55	\$13.35	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.98	\$16.55	\$13.35	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.43	\$16.55	\$13.35	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BARCO-TYPE JUMPING TAMPER	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER	12/1/2025	\$41.22	\$10.65	\$9.75	\$9.11	\$0.00	\$70.73
LABORERS	6/1/2026	\$42.66	\$10.65	\$9.75	\$9.11	\$0.00	\$72.17
LABORERS - ZONE 2	12/1/2026	\$44.10	\$10.65	\$9.75	\$9.11	\$0.00	\$73.61
	6/1/2027	\$45.55	\$10.65	\$9.75	\$9.11	\$0.00	\$75.06
	12/1/2027	\$47.00	\$10.65	\$9.75	\$9.11	\$0.00	\$76.51
	6/1/2028	\$48.50	\$10.65	\$9.75	\$9.11	\$0.00	\$78.01
	12/1/2028	\$50.00	\$10.65	\$9.75	\$9.11	\$0.00	\$79.51
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)	12/1/2025	\$41.22	\$10.65	\$9.75	\$9.21	\$0.00	\$70.83
LABORERS	6/1/2026	\$42.66	\$10.65	\$9.75	\$9.21	\$0.00	\$72.27
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.10	\$10.65	\$9.75	\$9.21	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
BOILER MAKER	1/1/2024	\$48.12	\$7.07	\$14.60	\$6.00	\$0.00	\$75.79
BOILERMAKERS LOCAL 29							
BOILERMAKERS LOCAL 29							

Apprentice: BOILER MAKER							
Effective Date: 1/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	65.00	\$31.28	\$7.07	\$9.32	\$3.90	\$0.00	\$51.57
2	65.00	\$31.28	\$7.07	\$9.32	\$3.90	\$0.00	\$51.57
3	70.00	\$33.68	\$7.07	\$10.03	\$4.20	\$0.00	\$54.98
4	75.00	\$36.09	\$7.07	\$10.74	\$4.50	\$0.00	\$58.40
5	80.00	\$38.50	\$7.07	\$11.45	\$4.80	\$0.00	\$61.82
6	85.00	\$40.90	\$7.07	\$12.18	\$5.10	\$0.00	\$65.25

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: BOILER MAKER Effective Date: 1/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
7	90.00	\$43.31	\$7.07	\$12.88	\$5.40	\$0.00	\$68.66
8	95.00	\$45.71	\$7.07	\$13.62	\$5.70	\$0.00	\$72.10
Apprentice to Journeyworker Ratio: 1:4							
BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	2/1/2026	\$67.95	\$12.84	\$15.57	\$8.02	\$0.00	\$104.38
BRICKLAYERS LOCAL 3	8/1/2026	\$70.15	\$12.84	\$15.57	\$8.02	\$0.00	\$106.58
BRICKLAYERS LOCAL 3 (NEW BEDFORD)	2/1/2027	\$71.55	\$12.84	\$15.57	\$8.02	\$0.00	\$107.98
Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.98	\$12.84	\$15.57	\$8.02	\$0.00	\$70.41
2	60.00	\$40.77	\$12.84	\$15.57	\$8.02	\$0.00	\$77.20
3	70.00	\$47.57	\$12.84	\$15.57	\$8.02	\$0.00	\$84.00
4	80.00	\$54.36	\$12.84	\$15.57	\$8.02	\$0.00	\$90.79
5	90.00	\$61.16	\$12.84	\$15.57	\$8.02	\$0.00	\$97.59
Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) Effective Date: 8/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$35.08	\$12.84	\$15.57	\$8.02	\$0.00	\$71.51
2	60.00	\$42.09	\$12.84	\$15.57	\$8.02	\$0.00	\$78.52
3	70.00	\$49.11	\$12.84	\$15.57	\$8.02	\$0.00	\$85.54
4	80.00	\$56.12	\$12.84	\$15.57	\$8.02	\$0.00	\$92.55
5	90.00	\$63.14	\$12.84	\$15.57	\$8.02	\$0.00	\$99.57
Apprentice to Journeyworker Ratio: 1:5							
BULLDOZER/GRADER/SCRAPER	12/1/2025	\$58.02	\$16.55	\$13.35	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.30	\$16.55	\$13.35	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$60.74	\$16.55	\$13.35	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
CAISSON & UNDERPINNING BOTTOM MAN	12/1/2025	\$49.10	\$10.65	\$9.75	\$9.80	\$0.00	\$79.30
LABORERS	6/1/2026	\$50.65	\$10.65	\$9.75	\$9.80	\$0.00	\$80.85
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$52.15	\$10.65	\$9.75	\$9.80	\$0.00	\$82.35
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING LABORER	12/1/2025	\$47.95	\$10.65	\$9.75	\$9.80	\$0.00	\$78.15
LABORERS	6/1/2026	\$49.50	\$10.65	\$9.75	\$9.80	\$0.00	\$79.70

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$51.00	\$10.65	\$9.75	\$9.80	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING TOP MAN	12/1/2025	\$48.28	\$10.65	\$9.75	\$9.80	\$0.00	\$78.48
LABORERS	6/1/2026	\$49.83	\$10.65	\$9.75	\$9.80	\$0.00	\$80.03
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$51.33	\$10.65	\$9.75	\$9.80	\$0.00	\$81.53
For apprentice rates see "Apprentice- LABORER"							
CARBIDE CORE DRILL OPERATOR	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
CARPENTER	3/1/2026	\$50.85	\$11.08	\$11.47	\$8.50	\$0.00	\$81.90
CARPENTERS	9/1/2026	\$52.10	\$11.08	\$11.47	\$8.50	\$0.00	\$83.15
CARPENTERS -ZONE 2 (Eastern Massachusetts)	3/1/2027	\$53.35	\$11.08	\$11.47	\$8.50	\$0.00	\$84.40

Apprentice: CARPENTER							
Effective Date: 3/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$22.88	\$11.08	\$0.00	\$1.73	\$0.00	\$35.69
2	45.00	\$22.88	\$11.08	\$0.00	\$1.73	\$0.00	\$35.69
3	55.00	\$27.97	\$11.08	\$0.00	\$3.40	\$0.00	\$42.45
4	55.00	\$27.97	\$11.08	\$0.00	\$3.40	\$0.00	\$42.45
5	70.00	\$35.60	\$11.08	\$11.41	\$5.10	\$0.00	\$63.19
6	70.00	\$35.60	\$11.08	\$11.41	\$5.10	\$0.00	\$63.19
7	80.00	\$40.68	\$11.08	\$11.44	\$6.80	\$0.00	\$70.00
8	80.00	\$40.68	\$11.08	\$11.44	\$6.80	\$0.00	\$70.00

Apprentice: CARPENTER							
Effective Date: 9/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$23.45	\$11.08	\$0.00	\$1.73	\$0.00	\$36.26
2	45.00	\$23.45	\$11.08	\$0.00	\$1.73	\$0.00	\$36.26
3	55.00	\$28.66	\$11.08	\$0.00	\$3.40	\$0.00	\$43.14
4	55.00	\$28.66	\$11.08	\$0.00	\$3.40	\$0.00	\$43.14
5	70.00	\$36.47	\$11.08	\$11.41	\$5.10	\$0.00	\$64.06
6	70.00	\$36.47	\$11.08	\$11.41	\$5.10	\$0.00	\$64.06
7	80.00	\$41.68	\$11.08	\$11.44	\$6.80	\$0.00	\$71.00
8	80.00	\$41.68	\$11.08	\$11.44	\$6.80	\$0.00	\$71.00

Apprentice to Journeyworker Ratio: 1:5

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
CARPENTER WOOD FRAME	10/1/2025	\$27.37	\$7.38	\$4.47	\$1.00	\$0.00	\$40.22
CARPENTERS	10/1/2026	\$28.47	\$7.38	\$4.47	\$1.00	\$0.00	\$41.32
CARPENTERS-ZONE 3 (Wood Frame)							
All Aspects of New Wood Frame Work							

Apprentice: CARPENTER WOOD FRAME							
Effective Date: 10/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$16.42	\$7.38	\$0.00	\$0.00	\$0.00	\$23.80
2	60.00	\$16.42	\$7.38	\$0.00	\$0.00	\$0.00	\$23.80
3	65.00	\$17.79	\$7.38	\$0.00	\$1.00	\$0.00	\$26.17
4	70.00	\$19.16	\$7.38	\$0.00	\$1.00	\$0.00	\$27.54
5	75.00	\$20.53	\$7.38	\$3.80	\$1.00	\$0.00	\$32.71
6	80.00	\$21.90	\$7.38	\$3.80	\$1.00	\$0.00	\$34.08
7	85.00	\$23.26	\$7.38	\$3.80	\$1.00	\$0.00	\$35.44
8	90.00	\$24.63	\$7.38	\$3.80	\$1.00	\$0.00	\$36.81

Apprentice: CARPENTER WOOD FRAME							
Effective Date: 10/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$17.08	\$7.38	\$0.00	\$0.00	\$0.00	\$24.46
2	60.00	\$17.08	\$7.38	\$0.00	\$0.00	\$0.00	\$24.46
3	65.00	\$18.51	\$7.38	\$0.00	\$1.00	\$0.00	\$26.89
4	70.00	\$19.93	\$7.38	\$0.00	\$1.00	\$0.00	\$28.31
5	75.00	\$21.35	\$7.38	\$3.80	\$1.00	\$0.00	\$33.53
6	80.00	\$22.78	\$7.38	\$3.80	\$1.00	\$0.00	\$34.96
7	85.00	\$24.20	\$7.38	\$3.80	\$1.00	\$0.00	\$36.38
8	90.00	\$25.62	\$7.38	\$3.80	\$1.00	\$0.00	\$37.80

Apprentice to Journeyworker Ratio: 1:5

CEMENT MASONRY/PLASTERING	1/1/2026	\$53.24	\$13.35	\$16.43	\$7.78	\$1.80	\$92.60
PLASTERERS AND CEMENT MASONS LOCAL 534	7/1/2026	\$54.49	\$13.35	\$16.43	\$7.78	\$1.80	\$93.85
Plasterers and Cement Masons - Zone 1	1/1/2027	\$55.94	\$13.35	\$16.43	\$7.78	\$1.80	\$95.30
	7/1/2027	\$57.29	\$13.35	\$16.43	\$7.78	\$1.80	\$96.65
	1/1/2028	\$58.64	\$13.35	\$16.43	\$7.78	\$1.80	\$98.00

Apprentice: CEMENT MASONRY/PLASTERING							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.62	\$13.35	\$16.43	\$0.00	\$0.00	\$56.40
2	60.00	\$31.94	\$13.35	\$16.43	\$7.78	\$1.80	\$71.30
3	65.00	\$34.61	\$13.35	\$16.43	\$7.78	\$1.80	\$73.97
4	70.00	\$37.27	\$13.35	\$16.43	\$7.78	\$1.80	\$76.63

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: CEMENT MASONRY/PLASTERING							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
5	75.00	\$39.93	\$13.35	\$16.43	\$7.78	\$1.80	\$79.29
6	80.00	\$42.59	\$13.35	\$16.43	\$7.78	\$1.80	\$81.95
7	90.00	\$47.92	\$13.35	\$16.43	\$0.00	\$0.00	\$77.70
Apprentice: CEMENT MASONRY/PLASTERING							
Effective Date: 7/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$27.25	\$13.35	\$16.43	\$0.00	\$0.00	\$57.03
2	60.00	\$32.69	\$13.35	\$16.43	\$7.78	\$1.80	\$72.05
3	65.00	\$35.42	\$13.35	\$16.43	\$7.78	\$1.80	\$74.78
4	70.00	\$38.14	\$13.35	\$16.43	\$7.78	\$1.80	\$77.50
5	75.00	\$40.87	\$13.35	\$16.43	\$7.78	\$1.80	\$80.23
6	80.00	\$43.59	\$13.35	\$16.43	\$7.78	\$1.80	\$82.95
7	90.00	\$49.04	\$13.35	\$0.00	\$7.78	\$0.00	\$70.17
Apprentice to Journeyworker Ratio: 1:5							
CHAIN SAW OPERATOR	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES	12/1/2025	\$59.88	\$16.55	\$13.35	\$3.25	\$0.00	\$93.03
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.21	\$16.55	\$13.35	\$3.25	\$0.00	\$94.36
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$62.69	\$16.55	\$13.35	\$3.25	\$0.00	\$95.84
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
COMPRESSOR OPERATOR	12/1/2025	\$37.37	\$16.55	\$13.35	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$38.23	\$16.55	\$13.35	\$3.25	\$0.00	\$71.38
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$39.18	\$16.55	\$13.35	\$3.25	\$0.00	\$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DELEADER (BRIDGE)	1/1/2026	\$59.56	\$10.35	\$12.00	\$12.60	\$0.00	\$94.51
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: DELEADER (BRIDGE)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.78	\$10.35	\$0.00	\$0.00	\$0.00	\$40.13
2	55.00	\$32.76	\$10.35	\$0.00	\$6.93	\$0.00	\$50.04
3	60.00	\$35.74	\$10.35	\$0.00	\$7.56	\$0.00	\$53.65
4	65.00	\$38.71	\$10.35	\$0.00	\$8.19	\$0.00	\$57.25
5	70.00	\$41.69	\$10.35	\$12.00	\$8.82	\$0.00	\$72.86
6	75.00	\$44.67	\$10.35	\$12.00	\$9.45	\$0.00	\$76.47
7	80.00	\$47.65	\$10.35	\$12.00	\$10.08	\$0.00	\$80.08
8	90.00	\$53.60	\$10.35	\$12.00	\$11.34	\$0.00	\$87.29
Apprentice to Journeyworker Ratio: 1:1							
DEMO: ADZEMAN	12/1/2025	\$48.00	\$10.65	\$9.75	\$9.65	\$0.00	\$78.05
LABORERS	6/1/2026	\$49.55	\$10.65	\$9.75	\$9.65	\$0.00	\$79.60
LABORERS - ZONE 2	12/7/2026	\$51.05	\$10.65	\$9.75	\$9.65	\$0.00	\$81.10
	6/7/2027	\$52.65	\$10.65	\$9.75	\$9.65	\$0.00	\$82.70
	12/6/2027	\$54.25	\$10.65	\$9.75	\$9.65	\$0.00	\$84.30
	6/5/2028	\$55.93	\$10.65	\$9.75	\$9.65	\$0.00	\$85.98
	12/4/2028	\$57.60	\$10.65	\$9.75	\$9.65	\$0.00	\$87.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BACKHOE/LOADER/HAMMER OPERATOR	12/1/2025	\$49.00	\$10.65	\$9.75	\$9.65	\$0.00	\$79.05
LABORERS	6/1/2026	\$50.55	\$10.65	\$9.75	\$9.65	\$0.00	\$80.60
LABORERS - ZONE 2	12/7/2026	\$52.05	\$10.65	\$9.75	\$9.65	\$0.00	\$82.10
	6/7/2027	\$53.65	\$10.65	\$9.75	\$9.65	\$0.00	\$83.70
	12/6/2027	\$55.25	\$10.65	\$9.75	\$9.65	\$0.00	\$85.30
	6/5/2028	\$56.93	\$10.65	\$9.75	\$9.65	\$0.00	\$86.98
	12/4/2028	\$58.60	\$10.65	\$9.75	\$9.65	\$0.00	\$88.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BURNERS	12/1/2025	\$48.75	\$10.65	\$9.75	\$9.65	\$0.00	\$78.80
LABORERS	6/1/2026	\$50.30	\$10.65	\$9.75	\$9.65	\$0.00	\$80.35
LABORERS - ZONE 2	12/7/2026	\$51.80	\$10.65	\$9.75	\$9.65	\$0.00	\$81.85
	6/7/2027	\$53.40	\$10.65	\$9.75	\$9.65	\$0.00	\$83.45
	12/6/2027	\$55.00	\$10.65	\$9.75	\$9.65	\$0.00	\$85.05
	6/5/2028	\$56.68	\$10.65	\$9.75	\$9.65	\$0.00	\$86.73
	12/4/2028	\$58.35	\$10.65	\$9.75	\$9.65	\$0.00	\$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: CONCRETE CUTTER/SAWYER	12/1/2025	\$49.00	\$10.65	\$9.75	\$9.65	\$0.00	\$79.05
LABORERS	6/1/2026	\$50.55	\$10.65	\$9.75	\$9.65	\$0.00	\$80.60
LABORERS - ZONE 2	12/7/2026	\$52.05	\$10.65	\$9.75	\$9.65	\$0.00	\$82.10
	6/7/2027	\$53.65	\$10.65	\$9.75	\$9.65	\$0.00	\$83.70
	12/6/2027	\$55.25	\$10.65	\$9.75	\$9.65	\$0.00	\$85.30
	6/5/2028	\$56.93	\$10.65	\$9.75	\$9.65	\$0.00	\$86.98
	12/4/2028	\$58.60	\$10.65	\$9.75	\$9.65	\$0.00	\$88.65

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"							
DEMO: JACKHAMMER OPERATOR	12/1/2025	\$48.75	\$10.65	\$9.75	\$9.65	\$0.00	\$78.80
LABORERS	6/1/2026	\$50.30	\$10.65	\$9.75	\$9.65	\$0.00	\$80.35
LABORERS - ZONE 2	12/7/2026	\$51.80	\$10.65	\$9.75	\$9.65	\$0.00	\$81.85
	6/7/2027	\$53.40	\$10.65	\$9.75	\$9.65	\$0.00	\$83.45
	12/6/2027	\$55.00	\$10.65	\$9.75	\$9.65	\$0.00	\$85.05
	6/5/2028	\$56.68	\$10.65	\$9.75	\$9.65	\$0.00	\$86.73
	12/4/2028	\$58.35	\$10.65	\$9.75	\$9.65	\$0.00	\$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: WRECKING LABORER	12/1/2025	\$48.00	\$10.65	\$9.75	\$9.65	\$0.00	\$78.05
LABORERS	6/1/2026	\$49.55	\$10.65	\$9.75	\$9.65	\$0.00	\$79.60
LABORERS - ZONE 2	12/7/2026	\$51.05	\$10.65	\$9.75	\$9.65	\$0.00	\$81.10
	6/7/2027	\$52.65	\$10.65	\$9.75	\$9.65	\$0.00	\$82.70
	12/6/2027	\$54.25	\$10.65	\$9.75	\$9.65	\$0.00	\$84.30
	6/5/2028	\$55.93	\$10.65	\$9.75	\$9.65	\$0.00	\$85.98
	12/4/2028	\$57.60	\$10.65	\$9.75	\$9.65	\$0.00	\$87.65
For apprentice rates see "Apprentice- LABORER"							
DIRECTIONAL DRILL MACHINE OPERATOR	12/1/2025	\$58.02	\$16.55	\$13.35	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.30	\$16.55	\$13.35	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$60.74	\$16.55	\$13.35	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DIVER	8/1/2024	\$78.11	\$10.08	\$11.62	\$10.04	\$0.00	\$109.85
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Diver wage 70/80/90 2A \$69.83, 3A \$91.79,4A \$102.14 Total Rate							
DIVER TENDER	8/1/2024	\$55.79	\$10.08	\$11.62	\$12.67	\$0.00	\$90.16
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Piledriver wage 70/80/90 2A \$54.20, 3A \$73.93,4A \$82.05 Total Rate							
DIVER TENDER (EFFLUENT)	8/1/2024	\$83.69	\$10.08	\$11.62	\$12.67	\$0.00	\$118.06
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
For apprentice rates see "Apprentice- PILE DRIVER"							
DIVER/SLURRY (EFFLUENT)	8/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
For apprentice rates see "Apprentice- PILE DRIVER"							
DRAWBRIDGE OPERATOR (Construction)	7/1/2020	\$26.77	\$6.67	\$3.93	\$0.00	\$0.16	\$37.53
DRAWBRIDGE - SEIU LOCAL 888							
DRAWBRIDGE - SEIU LOCAL 888							
ELECTRICIAN	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
ELECTRICIANS LOCAL 223	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
ELECTRICIANS LOCAL 223							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: ELECTRICIAN							
Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$20.90	\$12.25	\$0.63	\$0.00	\$0.00	\$33.78
2	45.00	\$23.51	\$12.25	\$0.71	\$0.00	\$0.00	\$36.47
3	50.00	\$26.13	\$12.25	\$0.78	\$0.00	\$0.00	\$39.16
4	55.00	\$28.74	\$12.25	\$6.61	\$2.50	\$0.00	\$50.10
5	60.00	\$31.35	\$12.25	\$7.21	\$2.50	\$0.00	\$53.31
6	65.00	\$33.96	\$12.25	\$7.82	\$2.50	\$0.00	\$56.53
7	70.00	\$36.58	\$12.25	\$8.41	\$2.50	\$0.00	\$59.74
8	75.00	\$39.19	\$12.25	\$9.02	\$2.50	\$0.00	\$62.96

Apprentice: ELECTRICIAN							
Effective Date: 9/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$21.89	\$12.50	\$0.66	\$0.00	\$0.00	\$35.05
2	45.00	\$24.62	\$12.50	\$0.74	\$0.00	\$0.00	\$37.86
3	50.00	\$27.36	\$12.50	\$0.82	\$0.00	\$0.00	\$40.68
4	55.00	\$30.10	\$12.50	\$6.92	\$2.75	\$0.00	\$52.27
5	60.00	\$32.83	\$12.50	\$7.54	\$2.75	\$0.00	\$55.62
6	65.00	\$35.57	\$12.50	\$8.18	\$2.75	\$0.00	\$59.00
7	70.00	\$38.30	\$12.50	\$8.81	\$2.75	\$0.00	\$62.36
8	75.00	\$41.04	\$12.50	\$9.43	\$2.75	\$0.00	\$65.72

Apprentice to Journeyworker Ratio: 2:3

ELEVATOR CONSTRUCTOR	1/1/2026	\$77.26	\$16.38	\$11.06	\$10.70	\$0.00	\$115.40
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	\$80.55	\$16.48	\$11.16	\$11.00	\$0.00	\$119.19
ELEVATOR CONSTRUCTORS LOCAL 4							

Apprentice: ELEVATOR CONSTRUCTOR							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$38.63	\$0.00	\$0.00	\$0.00	\$0.00	\$38.63
2	55.00	\$42.49	\$16.38	\$11.06	\$10.70	\$0.00	\$80.63
3	65.00	\$50.22	\$16.38	\$11.06	\$10.70	\$0.00	\$88.36
4	70.00	\$54.08	\$16.38	\$11.06	\$10.70	\$0.00	\$92.22
5	80.00	\$61.81	\$16.38	\$11.06	\$10.70	\$0.00	\$99.95

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: ELEVATOR CONSTRUCTOR Effective Date: 1/1/2027							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$40.28	\$0.00	\$0.00	\$0.00	\$0.00	\$40.28
2	55.00	\$44.30	\$16.48	\$11.16	\$11.00	\$0.00	\$82.94
3	65.00	\$52.36	\$16.48	\$11.16	\$11.00	\$0.00	\$91.00
4	70.00	\$56.39	\$16.48	\$11.16	\$11.00	\$0.00	\$95.03
5	80.00	\$64.44	\$16.48	\$11.16	\$11.00	\$0.00	\$103.08
Apprentice to Journeyworker Ratio: 1:1							
ELEVATOR CONSTRUCTOR HELPER	1/1/2026	\$54.08	\$16.38	\$11.06	\$10.07	\$0.00	\$91.59
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	\$56.39	\$16.48	\$11.16	\$11.00	\$0.00	\$95.03
ELEVATOR CONSTRUCTORS LOCAL 4							
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"							
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	11/1/2025	\$53.56	\$16.05	\$13.25	\$3.25	\$0.00	\$86.11
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$55.00	\$16.05	\$13.25	\$3.25	\$0.00	\$87.55
OPERATING ENGINEERS LOCAL 4	11/1/2026	\$56.29	\$16.05	\$13.25	\$3.25	\$0.00	\$88.84
	5/1/2027	\$57.72	\$16.05	\$13.25	\$3.25	\$0.00	\$90.27
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY	11/1/2025	\$55.17	\$16.05	\$13.25	\$3.25	\$0.00	\$87.72
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$56.62	\$16.05	\$13.25	\$3.25	\$0.00	\$89.17
OPERATING ENGINEERS LOCAL 4	11/1/2026	\$57.92	\$16.05	\$13.25	\$3.25	\$0.00	\$90.47
	5/1/2027	\$59.37	\$16.05	\$13.25	\$3.25	\$0.00	\$91.92
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	11/1/2025	\$26.03	\$16.05	\$13.25	\$3.25	\$0.00	\$58.58
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$26.88	\$16.05	\$13.25	\$3.25	\$0.00	\$59.43
OPERATING ENGINEERS LOCAL 4	11/1/2026	\$27.64	\$16.05	\$13.25	\$3.25	\$0.00	\$60.19
	5/1/2027	\$28.49	\$16.05	\$13.25	\$3.25	\$0.00	\$61.04
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIRE ALARM INSTALLER	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
ELECTRICIANS LOCAL 223	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
ELECTRICIANS LOCAL 223							
For apprentice rates see "Apprentice- ELECTRICIAN"							
FIRE ALARM REPAIR / MAINTENANCE	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
/ COMMISSIONING	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
ELECTRICIANS LOCAL 223							
ELECTRICIANS LOCAL 223							
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
FIREMAN (ASST. ENGINEER)	12/1/2025	\$47.09	\$16.55	\$13.35	\$3.25	\$0.00	\$80.24
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$48.15	\$16.55	\$13.35	\$3.25	\$0.00	\$81.30
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$49.33	\$16.55	\$13.35	\$3.25	\$0.00	\$82.48

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

FLAGGER & SIGNALER (HEAVY & HIGHWAY)	12/1/2025	\$28.09	\$10.65	\$9.75	\$9.21	\$0.00	\$57.70
LABORERS	6/1/2026	\$29.21	\$10.65	\$9.75	\$9.21	\$0.00	\$58.82
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$29.21	\$10.65	\$9.75	\$9.21	\$0.00	\$58.82

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

FLOORCOVERER	3/1/2026	\$59.24	\$10.33	\$11.47	\$8.80	\$0.00	\$89.84
FLOORCOVERERS LOCAL 2168	9/1/2026	\$60.74	\$10.33	\$11.47	\$8.80	\$0.00	\$91.34
FLOORCOVERERS LOCAL 2168 ZONE I	3/1/2027	\$62.24	\$10.33	\$11.47	\$8.80	\$0.00	\$92.84

Apprentice: FLOORCOVERER							
Effective Date: 3/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$26.66	\$10.33	\$0.00	\$1.76	\$0.00	\$38.75
2	45.00	\$26.66	\$10.33	\$0.00	\$1.76	\$0.00	\$38.75
3	55.00	\$32.58	\$10.33	\$0.00	\$3.52	\$0.00	\$46.43
4	55.00	\$32.58	\$10.33	\$0.00	\$3.52	\$0.00	\$46.43
5	70.00	\$41.47	\$10.33	\$11.47	\$5.28	\$0.00	\$68.55
6	70.00	\$41.47	\$10.33	\$11.47	\$5.28	\$0.00	\$68.55
7	80.00	\$47.39	\$10.33	\$11.47	\$7.04	\$0.00	\$76.23
8	80.00	\$47.39	\$10.33	\$11.47	\$7.04	\$0.00	\$76.23

Apprentice: FLOORCOVERER							
Effective Date: 9/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$27.33	\$10.33	\$0.00	\$1.76	\$0.00	\$39.42
2	45.00	\$27.33	\$10.33	\$0.00	\$1.76	\$0.00	\$39.42
3	55.00	\$33.41	\$10.33	\$0.00	\$3.52	\$0.00	\$47.26
4	55.00	\$33.41	\$10.33	\$0.00	\$3.52	\$0.00	\$47.26
5	70.00	\$42.52	\$10.33	\$11.47	\$5.28	\$0.00	\$69.60
6	70.00	\$42.52	\$10.33	\$11.47	\$5.28	\$0.00	\$69.60
7	80.00	\$48.59	\$10.33	\$11.47	\$7.04	\$0.00	\$77.43
8	80.00	\$48.59	\$10.33	\$11.47	\$7.04	\$0.00	\$77.43

Apprentice Notes							
Steps are 750 hrs.							

Apprentice to Journeyworker Ratio: 1:1

FORK LIFT/CHERRY PICKER	12/1/2025	\$58.68	\$16.55	\$13.35	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.98	\$16.55	\$13.35	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2026	\$61.43	\$16.55	\$13.35	\$3.25	\$0.00	\$94.58

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS	12/1/2025	\$37.37	\$16.55	\$13.35	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$38.23	\$16.55	\$13.35	\$3.25	\$0.00	\$71.38
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$39.18	\$16.55	\$13.35	\$3.25	\$0.00	\$72.33

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)	6/1/2025	\$43.13	\$10.80	\$8.25	\$5.50	\$0.00	\$67.68
GLAZIERS LOCAL 1333	6/1/2026	\$44.73	\$11.20	\$8.40	\$6.05	\$0.00	\$70.38
GLAZIERS LOCAL 1333	6/1/2027	\$46.73	\$11.60	\$8.55	\$6.60	\$0.00	\$73.48
	6/1/2028	\$48.73	\$12.00	\$8.70	\$7.20	\$0.00	\$76.63

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)**Effective Date: 6/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$21.57	\$10.80	\$8.25	\$5.50	\$0.00	\$46.12
2	56.25	\$24.26	\$10.80	\$8.25	\$5.50	\$0.00	\$48.81
3	62.50	\$26.96	\$10.80	\$8.25	\$5.50	\$0.00	\$51.51
4	68.75	\$29.65	\$10.80	\$8.25	\$5.50	\$0.00	\$54.20
5	75.00	\$32.35	\$10.80	\$8.25	\$5.50	\$0.00	\$56.90
6	81.25	\$35.04	\$10.80	\$8.25	\$5.50	\$0.00	\$59.59
7	87.50	\$37.74	\$10.80	\$8.25	\$5.50	\$0.00	\$62.29
8	93.75	\$40.43	\$10.80	\$8.25	\$5.50	\$0.00	\$64.98

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)**Effective Date: 6/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$22.37	\$11.20	\$8.40	\$6.05	\$0.00	\$48.02
2	56.25	\$25.16	\$11.20	\$8.40	\$6.05	\$0.00	\$50.81
3	62.50	\$27.96	\$11.20	\$8.40	\$6.05	\$0.00	\$53.61
4	68.75	\$30.75	\$11.20	\$8.40	\$6.05	\$0.00	\$56.40
5	75.00	\$33.55	\$11.20	\$8.40	\$6.05	\$0.00	\$59.20
6	81.25	\$36.34	\$11.20	\$8.40	\$6.05	\$0.00	\$61.99
7	87.50	\$39.14	\$11.20	\$8.40	\$6.05	\$0.00	\$64.79
8	93.75	\$41.93	\$11.20	\$8.40	\$6.05	\$0.00	\$67.58

Apprentice to Journeyworker Ratio: 3:1

HOISTING ENGINEER/CRANES/GRADALLS	12/1/2025	\$58.68	\$16.55	\$13.35	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.98	\$16.55	\$13.35	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.43	\$16.55	\$13.35	\$3.25	\$0.00	\$94.58

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: HOISTING ENGINEER/CRANES/GRADALLS							
Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$32.88	\$0.00	\$0.00	\$0.00	\$0.00	\$32.88
2	60.00	\$35.87	\$16.05	\$13.25	\$3.25	\$0.00	\$68.42
3	65.00	\$38.86	\$16.05	\$13.25	\$3.25	\$0.00	\$71.41
4	70.00	\$41.85	\$16.05	\$13.25	\$3.25	\$0.00	\$74.40
5	75.00	\$44.84	\$16.05	\$13.25	\$3.25	\$0.00	\$77.39
6	80.00	\$47.82	\$16.05	\$13.25	\$3.25	\$0.00	\$80.37
7	85.00	\$50.81	\$16.05	\$13.25	\$3.25	\$0.00	\$83.36
8	90.00	\$53.80	\$16.05	\$13.25	\$3.25	\$0.00	\$86.35
Apprentice: HOISTING ENGINEER/CRANES/GRADALLS							
Effective Date: 6/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$32.99	\$0.00	\$0.00	\$0.00	\$0.00	\$32.99
2	60.00	\$35.99	\$16.55	\$13.35	\$3.25	\$0.00	\$69.14
3	65.00	\$38.99	\$16.55	\$13.35	\$3.25	\$0.00	\$72.14
4	70.00	\$41.99	\$16.55	\$13.35	\$3.25	\$0.00	\$75.14
5	75.00	\$44.99	\$16.55	\$13.35	\$3.25	\$0.00	\$78.14
6	80.00	\$47.98	\$16.55	\$13.35	\$3.25	\$0.00	\$81.13
7	85.00	\$50.98	\$16.55	\$13.35	\$3.25	\$0.00	\$84.13
8	90.00	\$53.98	\$16.55	\$13.35	\$3.25	\$0.00	\$87.13
Apprentice to Journeyworker Ratio: 1:6							
HVAC (DUCTWORK)	4/1/2026	\$45.55	\$14.91	\$13.35	\$6.15	\$2.24	\$82.20
SHEETMETAL WORKERS LOCAL 17							
SHEETMETAL WORKERS LOCAL 17 - B							
For apprentice rates see "Apprentice- SHEET METAL WORKER"							
HVAC (ELECTRICAL CONTROLS)	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
ELECTRICIANS LOCAL 223	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
ELECTRICIANS LOCAL 223							
For apprentice rates see "Apprentice- ELECTRICIAN"							
HVAC (TESTING AND BALANCING - AIR)	4/1/2026	\$45.55	\$14.91	\$13.35	\$6.15	\$2.24	\$82.20
SHEETMETAL WORKERS LOCAL 17							
SHEETMETAL WORKERS LOCAL 17 - B							
For apprentice rates see "Apprentice- SHEET METAL WORKER"							
HVAC (TESTING AND BALANCING -WATER)	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HVAC MECHANIC	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HYDRAULIC DRILLS	12/1/2025	\$41.22	\$10.65	\$9.75	\$9.11	\$0.00	\$70.73
LABORERS	6/1/2026	\$42.66	\$10.65	\$9.75	\$9.11	\$0.00	\$72.17
LABORERS - ZONE 2	12/1/2026	\$44.10	\$10.65	\$9.75	\$9.11	\$0.00	\$73.61
	6/1/2027	\$45.55	\$10.65	\$9.75	\$9.11	\$0.00	\$75.06
	12/1/2027	\$47.00	\$10.65	\$9.75	\$9.11	\$0.00	\$76.51
	6/1/2028	\$48.50	\$10.65	\$9.75	\$9.11	\$0.00	\$78.01
	12/1/2028	\$50.00	\$10.65	\$9.75	\$9.11	\$0.00	\$79.51
For apprentice rates see "Apprentice- LABORER"							
HYDRAULIC DRILLS (HEAVY & HIGHWAY)	12/1/2025	\$41.22	\$10.65	\$9.75	\$9.21	\$0.00	\$70.83
LABORERS	6/1/2026	\$42.66	\$10.65	\$9.75	\$9.21	\$0.00	\$72.27
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.10	\$10.65	\$9.75	\$9.21	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
INSULATOR (PIPES & TANKS)	9/1/2025	\$54.31	\$14.75	\$9.52	\$10.09	\$0.00	\$88.67
HEAT & FROST INSULATORS LOCAL 6	9/1/2026	\$57.38	\$14.75	\$9.52	\$10.09	\$0.00	\$91.74
HEAT & FROST INSULATORS LOCAL 6 (SOUTHERN MASS)							

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$27.16	\$14.75	\$9.27	\$5.05	\$0.00	\$56.23
2	60.00	\$32.59	\$14.75	\$9.32	\$6.05	\$0.00	\$62.71
3	70.00	\$38.02	\$14.75	\$9.37	\$7.06	\$0.00	\$69.20
4	80.00	\$43.45	\$14.75	\$9.42	\$8.07	\$0.00	\$75.69

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$28.69	\$14.75	\$9.27	\$5.05	\$0.00	\$57.76
2	60.00	\$34.43	\$14.75	\$9.32	\$6.05	\$0.00	\$64.55
3	70.00	\$40.17	\$14.75	\$9.37	\$7.06	\$0.00	\$71.35
4	80.00	\$45.90	\$14.75	\$9.42	\$8.07	\$0.00	\$78.14

Apprentice to Journeyworker Ratio: 1:4

IRONWORKER/WELDER	3/16/2021	\$42.46	\$7.70	\$12.10	\$5.00	\$0.00	\$67.26
IRONWORKERS LOCAL 37							
IRONWORKERS LOCAL 37							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: IRONWORKER/WELDER Effective Date: 3/16/2021							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	70.00	\$29.72	\$7.70	\$12.10	\$5.00	\$0.00	\$54.52
2	75.00	\$31.85	\$7.70	\$12.10	\$5.00	\$0.00	\$56.65
3	80.00	\$33.97	\$7.70	\$12.10	\$5.00	\$0.00	\$58.77
4	85.00	\$36.09	\$7.70	\$12.10	\$5.00	\$0.00	\$60.89
5	90.00	\$38.21	\$7.70	\$12.10	\$5.00	\$0.00	\$63.01
6	95.00	\$40.34	\$7.70	\$12.10	\$5.00	\$0.00	\$65.14
Apprentice to Journeyworker Ratio: 1:4							
JACKHAMMER & PAVING BREAKER OPERATOR	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
LABORER	12/1/2025	\$40.47	\$10.65	\$9.75	\$9.11	\$0.00	\$69.98
LABORERS	6/1/2026	\$41.91	\$10.65	\$9.75	\$9.11	\$0.00	\$71.42
LABORERS - ZONE 2	12/1/2026	\$43.35	\$10.65	\$9.75	\$9.11	\$0.00	\$72.86
	6/1/2027	\$44.80	\$10.65	\$9.75	\$9.11	\$0.00	\$74.31
	12/1/2027	\$46.25	\$10.65	\$9.75	\$9.11	\$0.00	\$75.76
	6/1/2028	\$47.75	\$10.65	\$9.75	\$9.11	\$0.00	\$77.26
	12/1/2028	\$49.25	\$10.65	\$9.75	\$9.11	\$0.00	\$78.76
Apprentice: LABORER Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.03	\$10.15	\$9.50	\$9.11	\$0.00	\$53.79
2	70.00	\$29.20	\$10.15	\$9.50	\$9.11	\$0.00	\$57.96
3	80.00	\$33.38	\$10.15	\$9.50	\$9.11	\$0.00	\$62.14
4	90.00	\$37.55	\$10.15	\$9.50	\$9.11	\$0.00	\$66.31
Apprentice: LABORER Effective Date: 6/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.15	\$10.65	\$9.75	\$9.11	\$0.00	\$54.66
2	70.00	\$29.34	\$10.65	\$9.75	\$9.11	\$0.00	\$58.85
3	80.00	\$33.53	\$10.65	\$9.75	\$9.11	\$0.00	\$63.04

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: LABORER Effective Date: 6/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
4	90.00	\$37.72	\$10.65	\$9.75	\$9.11	\$0.00	\$67.23
Apprentice to Journeyworker Ratio: 1:5							
LABORER (HEAVY & HIGHWAY)	12/1/2025	\$40.47	\$10.65	\$9.75	\$9.21	\$0.00	\$70.08
LABORERS	6/1/2026	\$41.91	\$10.65	\$9.75	\$9.21	\$0.00	\$71.52
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.35	\$10.65	\$9.75	\$9.21	\$0.00	\$72.96
Apprentice: LABORER (HEAVY & HIGHWAY) Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.03	\$10.15	\$9.50	\$9.21	\$0.00	\$53.89
2	70.00	\$29.20	\$10.15	\$9.50	\$9.21	\$0.00	\$58.06
3	80.00	\$33.38	\$10.15	\$9.50	\$9.21	\$0.00	\$62.24
4	90.00	\$37.55	\$10.15	\$9.50	\$9.21	\$0.00	\$66.41
Apprentice: LABORER (HEAVY & HIGHWAY) Effective Date: 6/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.15	\$10.65	\$9.75	\$9.21	\$0.00	\$54.76
2	70.00	\$29.34	\$10.65	\$9.75	\$9.21	\$0.00	\$58.95
3	80.00	\$33.53	\$10.65	\$9.75	\$9.21	\$0.00	\$63.14
4	90.00	\$37.72	\$10.65	\$9.75	\$9.10	\$0.00	\$67.22
Apprentice to Journeyworker Ratio: 1:5							
LABORER: CARPENTER TENDER	12/1/2025	\$40.47	\$10.65	\$9.75	\$9.11	\$0.00	\$69.98
LABORERS	6/1/2026	\$41.91	\$10.65	\$9.75	\$9.11	\$0.00	\$71.42
LABORERS - ZONE 2	12/1/2026	\$43.35	\$10.65	\$9.75	\$9.11	\$0.00	\$72.86
	6/1/2027	\$44.80	\$10.65	\$9.75	\$9.11	\$0.00	\$74.31
	12/1/2027	\$46.25	\$10.65	\$9.75	\$9.11	\$0.00	\$75.76
	6/1/2028	\$47.75	\$10.65	\$9.75	\$9.11	\$0.00	\$77.26
	12/1/2028	\$49.25	\$10.65	\$9.75	\$9.11	\$0.00	\$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: CEMENT FINISHER TENDER	12/1/2025	\$40.47	\$10.65	\$9.75	\$9.11	\$0.00	\$69.98
LABORERS	6/1/2026	\$41.91	\$10.65	\$9.75	\$9.11	\$0.00	\$71.42
LABORERS - ZONE 2	12/1/2026	\$43.35	\$10.65	\$9.75	\$9.11	\$0.00	\$72.86
	6/1/2027	\$44.80	\$10.65	\$9.75	\$9.11	\$0.00	\$74.31
	12/1/2027	\$46.25	\$10.65	\$9.75	\$9.11	\$0.00	\$75.76
	6/1/2028	\$47.75	\$10.65	\$9.75	\$9.11	\$0.00	\$77.26

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2028	\$49.25	\$10.65	\$9.75	\$9.11	\$0.00	\$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER	12/1/2025	\$40.56	\$10.65	\$9.75	\$9.65	\$0.00	\$70.61
LABORERS	6/1/2026	\$42.00	\$10.65	\$9.75	\$9.65	\$0.00	\$72.05
LABORERS - ZONE 2	12/7/2026	\$43.44	\$10.65	\$9.75	\$9.65	\$0.00	\$73.49
	6/7/2027	\$44.89	\$10.65	\$9.75	\$9.65	\$0.00	\$74.94
	12/6/2027	\$46.34	\$10.65	\$9.75	\$9.65	\$0.00	\$76.39
	6/5/2028	\$47.84	\$10.65	\$9.75	\$9.65	\$0.00	\$77.89
	12/4/2028	\$49.34	\$10.65	\$9.75	\$9.65	\$0.00	\$79.39
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY)	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER	12/1/2025	\$40.47	\$10.65	\$9.75	\$9.11	\$0.00	\$69.98
LABORERS	6/1/2026	\$41.91	\$10.65	\$9.75	\$9.11	\$0.00	\$71.42
LABORERS - ZONE 2	12/1/2026	\$43.35	\$10.65	\$9.75	\$9.11	\$0.00	\$72.86
	6/1/2027	\$44.80	\$10.65	\$9.75	\$9.11	\$0.00	\$74.31
	12/1/2027	\$46.25	\$10.65	\$9.75	\$9.11	\$0.00	\$75.76
	6/1/2028	\$47.75	\$10.65	\$9.75	\$9.11	\$0.00	\$77.26
	12/1/2028	\$49.25	\$10.65	\$9.75	\$9.11	\$0.00	\$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER	12/1/2025	\$40.47	\$10.65	\$9.75	\$9.11	\$0.00	\$69.98
LABORERS	6/1/2026	\$41.91	\$10.65	\$9.75	\$9.11	\$0.00	\$71.42
LABORERS - ZONE 2	12/1/2026	\$43.35	\$10.65	\$9.75	\$9.11	\$0.00	\$72.86
	6/1/2027	\$44.80	\$10.65	\$9.75	\$9.11	\$0.00	\$74.31
	12/1/2027	\$46.25	\$10.65	\$9.75	\$9.11	\$0.00	\$75.76
	6/1/2028	\$47.75	\$10.65	\$9.75	\$9.11	\$0.00	\$77.26
	12/1/2028	\$49.25	\$10.65	\$9.75	\$9.11	\$0.00	\$78.76
This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"							
LASER BEAM OPERATOR	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

LASER BEAM OPERATOR (HEAVY & HIGHWAY)	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

MARBLE & TILE FINISHERS	2/1/2026	\$52.08	\$12.84	\$15.57	\$5.78	\$0.00	\$86.27
BRICKLAYERS LOCAL 3	8/1/2026	\$53.84	\$12.84	\$15.57	\$5.78	\$0.00	\$88.03
BRICKLAYERS LOCAL 3 - MARBLE & TILE	2/1/2027	\$54.96	\$12.84	\$15.57	\$5.78	\$0.00	\$89.15

Apprentice: MARBLE & TILE FINISHERS**Effective Date: 2/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.04	\$12.84	\$15.57	\$5.78	\$0.00	\$60.23
2	60.00	\$31.25	\$12.84	\$15.57	\$5.78	\$0.00	\$65.44
3	70.00	\$36.46	\$12.84	\$15.57	\$5.78	\$0.00	\$70.65
4	80.00	\$41.66	\$12.84	\$15.57	\$5.78	\$0.00	\$75.85
5	90.00	\$46.87	\$12.84	\$15.57	\$5.78	\$0.00	\$81.06

Apprentice: MARBLE & TILE FINISHERS**Effective Date: 8/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.92	\$12.84	\$15.57	\$5.78	\$0.00	\$61.11
2	60.00	\$32.30	\$12.84	\$15.57	\$5.78	\$0.00	\$66.49
3	70.00	\$37.69	\$12.84	\$15.57	\$5.78	\$0.00	\$71.88
4	80.00	\$43.07	\$12.84	\$15.57	\$5.78	\$0.00	\$77.26
5	90.00	\$48.46	\$12.84	\$15.57	\$5.78	\$0.00	\$82.65

Apprentice to Journeyworker Ratio: 1:5

MARBLE MASONS,TILELAYERS & TERRAZZO MECH	2/1/2026	\$67.97	\$12.84	\$15.57	\$7.99	\$0.00	\$104.37
BRICKLAYERS LOCAL 3	8/1/2026	\$70.17	\$12.84	\$15.57	\$7.99	\$0.00	\$106.57
BRICKLAYERS LOCAL 3 - MARBLE & TILE	2/1/2027	\$71.57	\$12.84	\$15.57	\$7.99	\$0.00	\$107.97

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH**Effective Date: 2/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.99	\$12.84	\$15.57	\$7.99	\$0.00	\$70.39
2	60.00	\$40.78	\$12.84	\$15.57	\$7.99	\$0.00	\$77.18
3	70.00	\$47.58	\$12.84	\$15.57	\$7.99	\$0.00	\$83.98
4	80.00	\$54.38	\$12.84	\$15.57	\$7.99	\$0.00	\$90.78

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
5	90.00	\$61.17	\$12.84	\$15.57	\$7.99	\$0.00	\$97.57
Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH Effective Date: 8/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$35.09	\$12.84	\$15.57	\$7.99	\$0.00	\$71.49
2	60.00	\$42.10	\$12.84	\$15.57	\$7.99	\$0.00	\$78.50
3	70.00	\$49.12	\$12.84	\$15.57	\$7.99	\$0.00	\$85.52
4	80.00	\$56.14	\$12.84	\$15.57	\$7.99	\$0.00	\$92.54
5	90.00	\$63.15	\$12.84	\$15.57	\$7.99	\$0.00	\$99.55
Apprentice to Journeyworker Ratio: 1:5							
MECH. SWEEPER OPERATOR (ON CONST. SITES)	12/1/2025	\$58.02	\$16.55	\$13.35	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.30	\$16.55	\$13.35	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$60.74	\$16.55	\$13.35	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MECHANICS MAINTENANCE	12/1/2025	\$58.02	\$16.55	\$13.35	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.30	\$16.55	\$13.35	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$60.74	\$16.55	\$13.35	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MILLWRIGHT (Zone 2)	1/5/2026	\$46.86	\$10.58	\$11.47	\$10.00	\$0.00	\$78.91
MILLWRIGHTS LOCAL 1121							
MILLWRIGHTS LOCAL 1121 - Zone 2							
Apprentice: MILLWRIGHT (Zone 2) Effective Date: 1/5/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$25.77	\$10.58	\$0.00	\$5.50	\$0.00	\$41.85
2	65.00	\$30.46	\$10.58	\$0.00	\$6.50	\$0.00	\$47.54
3	75.00	\$35.15	\$10.58	\$11.47	\$7.50	\$0.00	\$64.70
4	85.00	\$39.83	\$10.58	\$11.47	\$8.50	\$0.00	\$70.38
Apprentice Notes Step 1&2 Appr. indentured after 1/6/2020 receive no pension,							
Apprentice to Journeyworker Ratio: 1:4							
MORTAR MIXER	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
OILER (OTHER THAN TRUCK CRANES,GRADALLS)	12/1/2025	\$25.08	\$16.55	\$13.35	\$3.25	\$0.00	\$58.23
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$25.67	\$16.55	\$13.35	\$3.25	\$0.00	\$58.82
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$26.34	\$16.55	\$13.35	\$3.25	\$0.00	\$59.49
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OILER (TRUCK CRANES, GRADALLS)	12/1/2025	\$31.05	\$16.55	\$13.35	\$3.25	\$0.00	\$64.20
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$31.77	\$16.55	\$13.35	\$3.25	\$0.00	\$64.92
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$32.57	\$16.55	\$13.35	\$3.25	\$0.00	\$65.72
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OTHER POWER DRIVEN EQUIPMENT - CLASS II	12/1/2025	\$58.02	\$16.55	\$13.35	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.30	\$16.55	\$13.35	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$60.74	\$16.55	\$13.35	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PAINTER (BRIDGES/TANKS)	1/1/2026	\$59.56	\$10.35	\$12.00	\$12.50	\$0.00	\$94.41
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (BRIDGES/TANKS)**Effective Date: 1/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.78	\$10.35	\$0.00	\$0.00	\$0.00	\$40.13
2	55.00	\$32.76	\$10.35	\$0.00	\$6.93	\$0.00	\$50.04
3	60.00	\$35.74	\$10.35	\$0.00	\$7.56	\$0.00	\$53.65
4	65.00	\$38.71	\$10.35	\$0.00	\$8.19	\$0.00	\$57.25
5	70.00	\$41.69	\$10.35	\$12.00	\$8.82	\$0.00	\$72.86
6	75.00	\$44.67	\$10.35	\$12.00	\$9.45	\$0.00	\$76.47
7	80.00	\$47.65	\$10.35	\$12.00	\$10.08	\$0.00	\$80.08
8	90.00	\$53.60	\$10.35	\$12.00	\$11.34	\$0.00	\$87.29

Apprentice to Journeyworker Ratio: 1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	1/1/2026	\$50.46	\$10.35	\$12.00	\$12.60	\$0.00	\$85.41
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.							
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER (SPRAY OR SANDBLAST, NEW) *							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$25.23	\$10.35	\$0.00	\$0.00	\$0.00	\$35.58
2	55.00	\$27.75	\$10.35	\$0.00	\$6.93	\$0.00	\$45.03
3	60.00	\$30.28	\$10.35	\$0.00	\$7.56	\$0.00	\$48.19
4	65.00	\$32.80	\$10.35	\$0.00	\$8.19	\$0.00	\$51.34
5	70.00	\$35.32	\$10.35	\$12.00	\$8.82	\$0.00	\$66.49
6	75.00	\$37.85	\$10.35	\$12.00	\$9.45	\$0.00	\$69.65
7	80.00	\$40.37	\$10.35	\$12.00	\$10.08	\$0.00	\$72.80
8	90.00	\$45.41	\$10.35	\$12.00	\$11.34	\$0.00	\$79.10

Apprentice to Journeyworker Ratio: 1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT)	1/1/2026	\$48.52	\$10.35	\$12.00	\$12.60	\$0.00	\$83.47
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.26	\$10.35	\$0.00	\$0.00	\$0.00	\$34.61
2	55.00	\$26.69	\$10.35	\$0.00	\$6.93	\$0.00	\$43.97
3	60.00	\$29.11	\$10.35	\$0.00	\$7.56	\$0.00	\$47.02
4	65.00	\$31.54	\$10.35	\$0.00	\$8.19	\$0.00	\$50.08
5	70.00	\$33.96	\$10.35	\$12.00	\$8.82	\$0.00	\$65.13
6	75.00	\$36.39	\$10.35	\$12.00	\$9.45	\$0.00	\$68.19
7	80.00	\$38.82	\$10.35	\$12.00	\$10.08	\$0.00	\$71.25
8	90.00	\$43.67	\$10.35	\$12.00	\$11.34	\$0.00	\$77.36

Apprentice to Journeyworker Ratio: 1:1

PAINTER / TAPER (BRUSH, NEW) *	1/1/2026	\$49.06	\$10.35	\$12.00	\$12.60	\$0.00	\$84.01
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.							
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER / TAPER (BRUSH, NEW) *							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.53	\$10.35	\$0.00	\$0.00	\$0.00	\$34.88
2	55.00	\$26.98	\$10.35	\$0.00	\$6.93	\$0.00	\$44.26
3	60.00	\$29.44	\$10.35	\$0.00	\$7.56	\$0.00	\$47.35

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER / TAPER (BRUSH, NEW) * Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
4	65.00	\$31.89	\$10.35	\$0.00	\$8.19	\$0.00	\$50.43
5	70.00	\$34.34	\$10.35	\$12.00	\$8.82	\$0.00	\$65.51
6	75.00	\$36.80	\$10.35	\$12.00	\$9.45	\$0.00	\$68.60
7	80.00	\$39.25	\$10.35	\$12.00	\$10.08	\$0.00	\$71.68
8	90.00	\$44.15	\$10.35	\$12.00	\$11.34	\$0.00	\$77.84
Apprentice to Journeyworker Ratio: 1:1							
PAINTER / TAPER (BRUSH, REPAINT)	1/1/2026	\$47.12	\$10.35	\$12.00	\$12.60	\$0.00	\$82.07
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							
Apprentice: PAINTER / TAPER (BRUSH, REPAINT) Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$23.56	\$10.35	\$0.00	\$0.00	\$0.00	\$33.91
2	55.00	\$25.92	\$10.35	\$0.00	\$6.93	\$0.00	\$43.20
3	60.00	\$28.27	\$10.35	\$0.00	\$7.56	\$0.00	\$46.18
4	65.00	\$30.63	\$10.35	\$0.00	\$8.19	\$0.00	\$49.17
5	70.00	\$32.98	\$10.35	\$12.00	\$8.82	\$0.00	\$64.15
6	75.00	\$35.34	\$10.35	\$12.00	\$9.45	\$0.00	\$67.14
7	80.00	\$37.70	\$10.35	\$12.00	\$10.08	\$0.00	\$70.13
8	90.00	\$42.41	\$10.35	\$12.00	\$11.34	\$0.00	\$76.10
Apprentice to Journeyworker Ratio: 1:1							
PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY)	12/1/2025	\$40.47	\$10.65	\$9.75	\$9.21	\$0.00	\$70.08
LABORERS	6/1/2026	\$41.91	\$10.65	\$9.75	\$9.21	\$0.00	\$71.52
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.35	\$10.65	\$9.75	\$9.21	\$0.00	\$72.96
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
PANEL & PICKUP TRUCKS DRIVER	1/1/2026	\$40.78	\$16.17	\$21.78	\$0.00	\$0.00	\$78.73
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	\$41.78	\$16.17	\$21.78	\$0.00	\$0.00	\$79.73
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	\$41.78	\$16.17	\$23.52	\$0.00	\$0.00	\$81.47
	1/1/2027	\$41.78	\$16.77	\$23.52	\$0.00	\$0.00	\$82.07
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK)	8/1/2024	\$55.79	\$10.08	\$11.62	\$12.67	\$0.00	\$90.16
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
For apprentice rates see "Apprentice- PILE DRIVER"							
PILE DRIVER	8/1/2024	\$55.79	\$10.08	\$11.62	\$12.67	\$0.00	\$90.16
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PILE DRIVER Effective Date: 8/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$25.11	\$10.08	\$0.00	\$2.53	\$0.00	\$37.72
2	55.00	\$30.68	\$10.08	\$0.00	\$5.07	\$0.00	\$45.83
3	70.00	\$39.05	\$10.08	\$11.62	\$7.60	\$0.00	\$68.35
4	80.00	\$44.63	\$10.08	\$11.62	\$10.14	\$0.00	\$76.47
Apprentice to Journeyworker Ratio: 1:5							
PIPELAYER	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
PIPELAYER (HEAVY & HIGHWAY)	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
PLUMBER & PIPEFITTER	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							
Apprentice: PLUMBER & PIPEFITTER Effective Date: 8/25/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$22.10	\$10.15	\$2.50	\$0.00	\$0.00	\$34.75
2	50.00	\$27.62	\$10.15	\$2.50	\$0.00	\$0.00	\$40.27
3	60.00	\$33.14	\$10.15	\$8.40	\$0.50	\$0.00	\$52.19
4	70.00	\$38.67	\$10.15	\$13.44	\$0.80	\$0.00	\$63.06
5	80.00	\$44.19	\$10.15	\$16.80	\$1.00	\$0.00	\$72.14
Apprentice to Journeyworker Ratio: 1:3							
PNEUMATIC CONTROLS (TEMP.)	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
PNEUMATIC DRILL/TOOL OPERATOR	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) LABORERS	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWDERMAN & BLASTER LABORERS	12/1/2025	\$41.47	\$10.65	\$9.75	\$9.11	\$0.00	\$70.98
LABORERS - ZONE 2	6/1/2026	\$42.91	\$10.65	\$9.75	\$9.11	\$0.00	\$72.42
	12/1/2026	\$44.35	\$10.65	\$9.75	\$9.11	\$0.00	\$73.86
	6/1/2027	\$45.80	\$10.65	\$9.75	\$9.11	\$0.00	\$75.31
	12/1/2027	\$47.25	\$10.65	\$9.75	\$9.11	\$0.00	\$76.76
	6/1/2028	\$48.75	\$10.65	\$9.75	\$9.11	\$0.00	\$78.26
	12/1/2028	\$50.25	\$10.65	\$9.75	\$9.11	\$0.00	\$79.76
For apprentice rates see "Apprentice- LABORER"							
POWDERMAN & BLASTER (HEAVY & HIGHWAY) LABORERS	12/1/2025	\$41.47	\$10.65	\$9.75	\$9.21	\$0.00	\$71.08
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$42.91	\$10.65	\$9.75	\$9.21	\$0.00	\$72.52
	12/1/2026	\$44.35	\$10.65	\$9.75	\$9.21	\$0.00	\$73.96
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWER SHOVEL/DERRICK/TRENCHING MACHINE OPERATING ENGINEERS LOCAL 4	12/1/2025	\$58.68	\$16.55	\$13.35	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.98	\$16.55	\$13.35	\$3.25	\$0.00	\$93.13
	12/1/2026	\$61.43	\$16.55	\$13.35	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (CONCRETE) OPERATING ENGINEERS LOCAL 4	12/1/2025	\$58.02	\$16.55	\$13.35	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.30	\$16.55	\$13.35	\$3.25	\$0.00	\$92.45
	12/1/2026	\$60.74	\$16.55	\$13.35	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (DEWATERING, OTHER) OPERATING ENGINEERS LOCAL 4	12/1/2025	\$37.37	\$16.55	\$13.35	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$38.23	\$16.55	\$13.35	\$3.25	\$0.00	\$71.38
	12/1/2026	\$39.18	\$16.55	\$13.35	\$3.25	\$0.00	\$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
READY-MIX CONCRETE DRIVER TEAMSTERS 653 TEAMSTERS 653 - Southeastern Concrete (Weymouth)	8/1/2023	\$25.00	\$13.91	\$6.90	\$0.00	\$0.00	\$45.81
RECLAIMERS OPERATING ENGINEERS LOCAL 4	12/1/2025	\$58.02	\$16.55	\$13.35	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.30	\$16.55	\$13.35	\$3.25	\$0.00	\$92.45
	12/1/2026	\$60.74	\$16.55	\$13.35	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
RIDE-ON MOTORIZED BUGGY OPERATOR LABORERS	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

ROLLER/SPREADER/MULCHING MACHINE	12/1/2025	\$58.02	\$16.55	\$13.35	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.30	\$16.55	\$13.35	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$60.74	\$16.55	\$13.35	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

ROOFER (Inc.Roofers Waterproofing &Roofers Damproofg)	2/1/2026	\$53.53	\$14.53	\$12.67	\$9.03	\$0.00	\$89.76
ROOFERS LOCAL 33							
ROOFERS LOCAL 33							

Apprentice: ROOFER (Inc.Roofers Waterproofing &Roofers Damproofg)**Effective Date: 2/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.77	\$14.53	\$6.52	\$9.03	\$0.00	\$56.85
2	60.00	\$32.12	\$14.53	\$12.67	\$9.03	\$0.00	\$68.35
3	65.00	\$34.79	\$14.53	\$12.67	\$9.03	\$0.00	\$71.02
4	75.00	\$40.15	\$14.53	\$12.67	\$9.03	\$0.00	\$76.38
5	85.00	\$45.50	\$14.53	\$12.67	\$9.03	\$0.00	\$81.73

Apprentice Notes**** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1****Apprentice to Journeyworker Ratio: 1:5**

ROOFER SLATE / TILE / PRECAST CONCRETE	2/1/2026	\$53.78	\$14.53	\$12.67	\$9.03	\$0.00	\$90.01
ROOFERS LOCAL 33							
ROOFERS LOCAL 33							

For apprentice rates see "Apprentice- ROOFER"

SHEETMETAL WORKER	4/1/2026	\$45.55	\$14.91	\$13.35	\$6.15	\$2.24	\$82.20
SHEETMETAL WORKERS LOCAL 17							
SHEETMETAL WORKERS LOCAL 17 - B							

Apprentice: SHEETMETAL WORKER**Effective Date: 4/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$18.22	\$14.91	\$4.27	\$0.00	\$1.09	\$38.49
2	45.00	\$20.50	\$14.91	\$4.80	\$0.00	\$1.17	\$41.38
3	50.00	\$22.78	\$14.91	\$12.28	\$0.00	\$1.45	\$51.42
4	55.00	\$25.05	\$14.91	\$12.28	\$0.00	\$1.52	\$53.76
5	60.00	\$27.33	\$14.91	\$12.28	\$3.69	\$1.64	\$59.85

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: SHEETMETAL WORKER Effective Date: 4/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
6	65.00	\$29.61	\$14.91	\$12.28	\$4.00	\$1.71	\$62.51
7	70.00	\$31.89	\$14.91	\$12.28	\$4.31	\$1.78	\$65.17
8	75.00	\$34.16	\$14.91	\$12.28	\$4.61	\$1.86	\$67.82
9	80.00	\$36.44	\$14.91	\$12.28	\$4.92	\$1.93	\$70.48
10	85.00	\$38.72	\$14.91	\$12.28	\$5.23	\$2.00	\$73.14
Apprentice to Journeyworker Ratio: 1:4							
SPECIALIZED EARTH MOVING EQUIP < 35 TONS	1/1/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$0.00	\$79.19
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$0.00	\$80.19
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$0.00	\$81.93
	1/1/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$0.00	\$82.53
SPECIALIZED EARTH MOVING EQUIP > 35 TONS	1/1/2026	\$41.53	\$16.17	\$21.78	\$0.00	\$0.00	\$79.48
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	\$42.53	\$16.17	\$21.78	\$0.00	\$0.00	\$80.48
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	\$42.53	\$16.17	\$23.52	\$0.00	\$0.00	\$82.22
	1/1/2027	\$42.53	\$16.77	\$23.52	\$0.00	\$0.00	\$82.82
SPRINKLER FITTER	1/1/2026	\$64.85	\$13.45	\$7.45	\$18.25	\$0.00	\$104.00
SPRINKLER FITTERS LOCAL 550							
SPRINKLER FITTERS LOCAL 550 - (Section B) Zone 2							

Apprentice: SPRINKLER FITTER Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	0.00	\$22.70	\$13.45	\$13.84	\$0.00	\$0.00	\$49.99
2	0.00	\$25.94	\$13.45	\$14.75	\$0.00	\$0.00	\$54.14
3	0.00	\$29.18	\$13.45	\$15.67	\$0.00	\$0.00	\$58.30
4	0.00	\$32.43	\$13.45	\$16.57	\$0.00	\$0.00	\$62.45
5	0.00	\$35.67	\$13.45	\$17.49	\$0.00	\$0.00	\$66.61
6	0.00	\$38.91	\$13.45	\$18.40	\$0.00	\$0.00	\$70.76
7	0.00	\$42.15	\$13.45	\$19.32	\$0.00	\$0.00	\$74.92
8	0.00	\$45.40	\$13.45	\$20.22	\$0.00	\$0.00	\$79.07
9	0.00	\$48.64	\$13.45	\$21.15	\$0.00	\$0.00	\$83.24
10	0.00	\$51.88	\$13.45	\$22.05	\$0.00	\$0.00	\$87.38

Apprentice Notes

Apprentice entered prior 9/30/10:

Apprentice to Journeyworker Ratio: 1:3

STEAM BOILER OPERATOR	12/1/2025	\$58.02	\$16.55	\$13.35	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.30	\$16.55	\$13.35	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2026	\$60.74	\$16.55	\$13.35	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN	12/1/2025	\$58.02	\$16.55	\$13.35	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.30	\$16.55	\$13.35	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$60.74	\$16.55	\$13.35	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TELECOMMUNICATION TECHNICIAN	9/1/2025	\$42.52	\$12.00	\$12.05	\$3.25	\$0.00	\$69.82
TELECOMMUNICATION TECHNICIAN	9/1/2026	\$44.41	\$12.25	\$12.59	\$3.50	\$0.00	\$72.75
ELECTRICIANS LOCAL 223	9/1/2027	\$46.51	\$12.50	\$13.18	\$3.75	\$0.00	\$75.94
ELECTRICIANS LOCAL 223							
For apprentice rates and ratios see "Apprentice- ELECTRICIAN"							
TERRAZZO FINISHERS	2/1/2026	\$66.89	\$12.84	\$15.57	\$8.02	\$0.00	\$103.32
BRICKLAYERS LOCAL 3	8/1/2026	\$69.09	\$12.84	\$15.57	\$8.02	\$0.00	\$105.52
BRICKLAYERS LOCAL 3 - MARBLE & TILE	2/1/2027	\$70.49	\$12.84	\$15.57	\$8.02	\$0.00	\$106.92

Apprentice: TERRAZZO FINISHERS**Effective Date: 2/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.45	\$12.84	\$15.57	\$8.02	\$0.00	\$69.88
2	60.00	\$40.13	\$12.84	\$15.57	\$8.02	\$0.00	\$76.56
3	70.00	\$46.82	\$12.84	\$15.57	\$8.02	\$0.00	\$83.25
4	80.00	\$53.51	\$12.84	\$15.57	\$8.02	\$0.00	\$89.94
5	90.00	\$60.20	\$12.84	\$15.57	\$8.02	\$0.00	\$96.63

Apprentice: TERRAZZO FINISHERS**Effective Date: 8/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.55	\$12.84	\$15.57	\$8.02	\$0.00	\$70.98
2	60.00	\$41.45	\$12.84	\$15.57	\$8.02	\$0.00	\$77.88
3	70.00	\$48.36	\$12.84	\$15.57	\$8.02	\$0.00	\$84.79
4	80.00	\$55.27	\$12.84	\$15.57	\$8.02	\$0.00	\$91.70
5	90.00	\$62.18	\$12.84	\$15.57	\$8.02	\$0.00	\$98.61

Apprentice to Journeyworker Ratio: 1:5

TEST BORING DRILLER	12/1/2025	\$51.95	\$10.65	\$9.75	\$9.80	\$0.00	\$82.15
LABORERS	6/1/2026	\$53.50	\$10.65	\$9.75	\$9.80	\$0.00	\$83.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$55.00	\$10.65	\$9.75	\$9.80	\$0.00	\$85.20
For apprentice rates see "Apprentice- LABORER"							
TEST BORING DRILLER HELPER	12/1/2025	\$48.07	\$10.65	\$9.75	\$9.80	\$0.00	\$78.27
LABORERS	6/1/2026	\$49.62	\$10.65	\$9.75	\$9.80	\$0.00	\$79.82
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$51.12	\$10.65	\$9.75	\$9.80	\$0.00	\$81.32
For apprentice rates see "Apprentice- LABORER"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
TEST BORING LABORER	12/1/2025	\$47.95	\$10.65	\$9.75	\$9.80	\$0.00	\$78.15
LABORERS	6/1/2026	\$49.50	\$10.65	\$9.75	\$9.80	\$0.00	\$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$51.00	\$10.65	\$9.75	\$9.80	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"							
TRACTORS/PORTABLE STEAM GENERATORS	12/1/2025	\$58.02	\$16.55	\$13.35	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.30	\$16.55	\$13.35	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$60.74	\$16.55	\$13.35	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TRAILERS FOR EARTH MOVING EQUIPMENT	1/1/2026	\$41.82	\$16.17	\$21.78	\$0.00	\$0.00	\$79.77
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	\$42.82	\$16.17	\$21.78	\$0.00	\$0.00	\$80.77
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	\$42.82	\$16.17	\$23.52	\$0.00	\$0.00	\$82.51
	1/1/2027	\$42.82	\$16.77	\$23.52	\$0.00	\$0.00	\$83.11
TUNNEL WORK - COMPRESSED AIR	12/1/2025	\$60.18	\$10.65	\$9.75	\$10.25	\$0.00	\$90.83
LABORERS	6/1/2026	\$61.73	\$10.65	\$9.75	\$10.25	\$0.00	\$92.38
LABORERS (COMPRESSED AIR)	12/1/2026	\$63.23	\$10.65	\$9.75	\$10.25	\$0.00	\$93.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE)	12/1/2025	\$62.18	\$10.65	\$9.75	\$10.25	\$0.00	\$92.83
LABORERS	6/1/2026	\$63.73	\$10.65	\$9.75	\$10.25	\$0.00	\$94.38
LABORERS (COMPRESSED AIR)	12/1/2026	\$65.23	\$10.65	\$9.75	\$10.25	\$0.00	\$95.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR	12/1/2025	\$52.25	\$10.65	\$9.75	\$10.25	\$0.00	\$82.90
LABORERS	6/1/2026	\$53.80	\$10.65	\$9.75	\$10.25	\$0.00	\$84.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	\$55.30	\$10.65	\$9.75	\$10.25	\$0.00	\$85.95
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR (HAZ. WASTE)	12/1/2025	\$54.25	\$10.65	\$9.75	\$10.25	\$0.00	\$84.90
LABORERS	6/1/2026	\$55.80	\$10.65	\$9.75	\$10.25	\$0.00	\$86.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	\$57.30	\$10.65	\$9.75	\$10.25	\$0.00	\$87.95
For apprentice rates see "Apprentice- LABORER"							
VAC-HAUL	1/1/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$0.00	\$79.19
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$0.00	\$80.19
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$0.00	\$81.93
	1/1/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$0.00	\$82.53
WAGON DRILL OPERATOR	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
WAGON DRILL OPERATOR (HEAVY & HIGHWAY)	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
WASTE WATER PUMP OPERATOR	12/1/2025	\$58.68	\$16.55	\$13.35	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.98	\$16.55	\$13.35	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.43	\$16.55	\$13.35	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
WATER METER INSTALLER	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"							

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
CABLE TECHNICIAN (Power Zone)	8/31/2025	\$36.55	\$10.75	\$1.10	\$1.00	\$0.00	\$49.40
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	\$38.13	\$11.00	\$1.14	\$1.00	\$0.00	\$51.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	\$39.65	\$11.25	\$1.19	\$1.00	\$0.00	\$53.09
For apprentice rates see "Apprentice- LINEMAN"							
CABLEMAN (Underground Ducts & Cables)	8/31/2025	\$51.78	\$10.75	\$1.55	\$10.71	\$0.00	\$74.79
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	\$54.02	\$11.00	\$1.62	\$11.14	\$0.00	\$77.78
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	\$56.17	\$11.25	\$1.69	\$11.57	\$0.00	\$80.68
For apprentice rates see "Apprentice- LINEMAN"							
DRIVER / GROUNDMAN CDL	8/31/2025	\$42.64	\$10.75	\$1.28	\$10.45	\$0.00	\$65.12
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	\$44.49	\$11.00	\$1.33	\$10.80	\$0.00	\$67.62
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	\$46.26	\$11.25	\$1.39	\$11.15	\$0.00	\$70.05
For apprentice rates see "Apprentice- LINEMAN"							
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs)	8/31/2025	\$33.51	\$10.75	\$1.01	\$1.00	\$0.00	\$46.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	\$34.95	\$11.00	\$1.05	\$1.00	\$0.00	\$48.00
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	\$36.64	\$11.25	\$1.09	\$1.00	\$0.00	\$49.98
For apprentice rates see "Apprentice- LINEMAN"							
EQUIPMENT OPERATOR (Class A CDL)	8/31/2025	\$51.78	\$10.75	\$1.55	\$14.79	\$0.00	\$78.87
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	\$54.02	\$11.00	\$1.62	\$15.22	\$0.00	\$81.86
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	\$56.17	\$11.25	\$1.69	\$15.65	\$0.00	\$84.76
For apprentice rates see "Apprentice- LINEMAN"							
EQUIPMENT OPERATOR (Class B CDL)	8/31/2025	\$45.69	\$10.75	\$1.37	\$11.27	\$0.00	\$69.08
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	\$47.66	\$11.00	\$1.43	\$11.65	\$0.00	\$71.74
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	\$49.56	\$11.25	\$1.49	\$12.03	\$0.00	\$74.33
For apprentice rates see "Apprentice- LINEMAN"							
GROUNDMAN	8/31/2025	\$33.51	\$10.75	\$1.01	\$1.00	\$0.00	\$46.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	\$34.95	\$11.00	\$1.05	\$1.00	\$0.00	\$48.00
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	\$36.34	\$11.25	\$1.09	\$1.00	\$0.00	\$49.68
For apprentice rates see "Apprentice- LINEMAN"							
GROUNDMAN -Inexperienced (<2000 Hrs.)	8/31/2025	\$27.41	\$10.75	\$0.82	\$1.00	\$0.00	\$39.98
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	\$28.60	\$11.00	\$0.86	\$1.00	\$0.00	\$41.46
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	\$29.74	\$11.25	\$0.89	\$1.00	\$0.00	\$42.88
For apprentice rates see "Apprentice- LINEMAN"							
JOURNEYMAN LINEMAN	8/31/2025	\$60.92	\$10.75	\$1.83	\$18.00	\$0.00	\$91.50
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	\$63.55	\$11.00	\$1.91	\$18.50	\$0.00	\$94.96
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	\$66.08	\$11.25	\$1.98	\$19.00	\$0.00	\$98.31

Apprentice: JOURNEYMAN LINEMAN**Effective Date: 8/31/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: JOURNEYMAN LINEMAN Effective Date: 8/31/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
5	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
6	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
7	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Apprentice: JOURNEYMAN LINEMAN Effective Date: 8/30/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
5	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
6	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
7	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Apprentice to Journeyworker Ratio: 1:2							
TELEDATA CABLE SPLICER OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	\$30.73	\$4.70	\$0.92	\$2.25	\$0.00	\$38.60
TELEDATA LINEMAN/EQUIPMENT OPERATOR OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	\$28.93	\$4.70	\$0.89	\$2.25	\$0.00	\$36.77
TELEDATA WIREMAN/INSTALLER/TECHNICIAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	\$28.93	\$4.70	\$0.89	\$2.25	\$0.00	\$36.77

Additional Apprentice Information

All apprentices must be registered with the Division of Apprenticeship Training(DAS) in accordance with M.G.L.c. 23, §§ 11E-11L. Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the hourly prevailing wage rate established by the Commissioner under the provisions of M.G.L.c. 149, §§ 26-27D.

Apprentice ratios are established by DAS pursuant to M.G.L.c. 23, §§ 11E-11L. Ratios are expressed as the allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified. The ratios listed herein have been taken from relevant private collective bargaining agreements(CBAs) and are provided for illustrative purposes only. They have not been independently verified as being accurate or continuing to be accurate.

Parties having questions regarding what ratio to use should contact DAS.

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STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT
SPECIFICATIONS
(EXECUTIVE ORDER 11246)
Revised April 9, 2019

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 the 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 7a 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. The Contractor is expected to make substantially uniform progress toward 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 nonworking 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 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 on-site 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 supervisor's 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 work force 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 of 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 many be required by the Government and 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).

APPENDIX A

The following goals and timetables for female utilization shall be included in all Federal and federally assisted construction contracts and subcontracts in excess of \$ 10,000. The goals are applicable to the Contractor's aggregate on-site construction workforce whether or not part of that workforce is performing work on a Federal or federally-assisted construction contract or subcontract.

Area covered: Goal for Women apply nationwide

Goals and TimetablesTimetableGoals (percent)

From Apr. 1, 1980 until further notice

6.9

APPENDIX B-80

Until further notice, the following goals for minority utilization in each construction craft and trade shall included in all Federal or federally assisted construction contracts and subcontracts in excess of \$ 10,000 to be performed in the respective geographical areas. The goals are applicable to each nonexempt contractor's total on- site construction workforce, regardless of whether or not part of that workforce is performing work on a Federal, federally assisted or nonfederally related project, contract or subcontract.

Construction contractors participating in an approved Hometown Plan (see 41 CFR 6-4.5) are required to comply with the goals of the Hometown Plan with regard to construction work they perform in the area covered by the Hometown Plan. With regard to all their other covered construction work, such contractors are required to comply with the applicable SMSA or EA goal contained in this Appendix B-80.

Economic AreasSTATE:Goals (percent)

MASSACHUSETTS

004 Boston MA:

SMSA Counties:

1123 Boston-Lowell-Brockton-Lawrence-Haverhill, MA-NH

4.0

MA Essex, MA Middlesex, MA Norfolk, MA Plymouth,
MA Suffolk, NH Rockingham.

5403 Fall River- New Bedford MA, Bristol

1.6

9243 Worcester-Fitchburg-Leominster, MA

1.6

6323 Springfield-Chicopee-Holyoke MA-CT

4.8

MA Hampden, MA Hampshire

Non-SMSA Counties: MA Barnstable, MA Dukes, MA Nantucket

3.6

Non-SMSA Counties: MA Franklin

5.9

APPENDIX C

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin (including limited English proficiency), age, sex, disability, or low-income status in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontractors, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Acts and the Regulations relative to nondiscrimination on the grounds of race, color, national origin (including limited English proficiency), age, sex, disability, or low-income status.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Massachusetts Department of Transportation (MassDOT) or FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor will so certify to MassDOT or FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Nondiscrimination provisions of this contract, MassDOT will impose such contract sanctions as it or FHWA may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as MassDOT or FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request MassDOT to enter into any litigation to protect the interests of MassDOT. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX D

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor,” which includes consultants) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

PERTINENT NON-DISCRIMINATION AUTHORITIES:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-Aid programs and projects)
- Federal-Aid Highway Act of 1973 (23 U.S.C. § 324 *et seq.*) (prohibits discrimination on the basis of sex)
- Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability) and 49 CFR Part 27
- The Age Discrimination Act of 1975, as amended (42 U.S.C. § 6101 *et seq.*) (prohibits discrimination on the basis of age)
- Airport and Airway Improvement Act of 1982 (49 U.S.C. § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex)
- The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage, and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of Federal-Aid recipients, sub-recipients, and contractors, whether such programs or activities are Federally funded or not)
- Titles II and III of the Americans with Disabilities Act (42 U.S.C. §§ 12131-12189), as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38 (prohibits discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities)
- The Federal Aviation Administration’s Non-Discrimination Statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex)
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations)
- Executive Order 13166, Improving Access to Services for People with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100)
- Title IX of the Education Amendments Act of 1972, as amended (20 U.S.C. 1681 *et seq.*) (prohibits discrimination on the basis of sex in education programs or activities)

*** END OF DOCUMENT ***

DOCUMENT 00880

Revised January 12, 2022



DEPARTMENT OF LABOR

Employment Standards Administration

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONTRACTS

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"General Decision Number: MA20260023 01/02/2026

Superseded General Decision Number: MA20250023

State: Massachusetts

Construction Type: Highway

County: Plymouth County in Massachusetts.

HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	01/02/2026

CARP0330-003 09/01/2025

	Rates	Fringes
CARPENTER (Includes Form Work)...	\$ 50.10	31.45

ENGI0004-027 06/01/2025

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Group 1.....	\$ 57.83	33.70
Group 2.....	\$ 57.18	33.70

FOOTNOTE FOR POWER EQUIPMENT OPERATORS:

A. PAID HOLIDAYS: New Year's Day, Washington's Birthday,
Labor Day, Memorial Day, Independence Day, Patriot's Day,
Columbus Day, Veteran's Day, Thanksgiving Day, Christmas Day

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

Group 1: Backhoe/Excavator/Trackhoe; Bobcat/Skid Steer/Skid
Loader; Broom/Sweeper; Crane; Gradall; Loader; Post Driver
(Guardrail/Fences)
Group 2: Bulldozer; Grader/Blade; Milling Machine; Roller

IRON0007-026 09/16/2025

	Rates	Fringes
IRONWORKER (ORNAMENTAL AND STRUCTURAL)	\$ 57.87	37.67

LABO0133-001 12/01/2024

	Rates	Fringes
LABORER (Concrete Surfacers)	\$ 46.20	29.85

LABO0385-002 12/01/2024

	Rates	Fringes
LABORER (Landscape)	\$ 38.95	29.41

LABO0385-003 12/01/2024

	Rates	Fringes
LABORER (Fence Erection)	\$ 38.95	29.41

LABO0721-002 12/01/2024

	Rates	Fringes
LABORER (Guardrail Installation)	\$ 38.95	29.81

LABO0876-001 06/01/2018

	Rates	Fringes
LABORER (Common or General)	\$ 33.25	22.92

PAIN0035-023 07/01/2024

	Rates	Fringes
PAINTER (Steel)	\$ 56.76	36.00

SUMA2014-013 01/11/2017

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER....	\$ 56.70	21.08
ELECTRICIAN, Includes Traffic Signalization.....	\$ 45.13	13.86
IRONWORKER, REINFORCING.....	\$ 44.52	19.36
LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor.....	\$ 34.32	17.35
LABORER: Concrete Saw (Hand Held/Walk Behind).....	\$ 44.43	14.18
LABORER: Jack Hammer.....	\$ 38.69	17.33
OPERATOR: Forklift.....	\$ 64.67	0.00
OPERATOR: Mechanic.....	\$ 48.74	11.79
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 41.63	23.04
OPERATOR: Piledriver.....	\$ 42.56	17.34
PAINTER: Spray (Linestriping)....	\$ 47.30	6.42
TRAFFIC CONTROL: Flagger.....	\$ 23.00	20.44
TRAFFIC CONTROL: Laborer-Cones/ Barricades/Barrels - Setter/Mover/Sweeper.....	\$ 53.35	12.78
TRUCK DRIVER: Concrete Truck....	\$ 33.69	15.79
TRUCK DRIVER: Dump Truck.....	\$ 37.35	11.00
TRUCK DRIVER: Flatbed Truck.....	\$ 48.53	0.00

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

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year.

Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

<https://www.dol.gov/agencies/whd/government-contracts>.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least \$13.30 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 2025. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 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) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than "SU", "UAVG", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

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

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail 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 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.

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END OF GENERAL DECISION

DOCUMENT A00801

SPECIAL PROVISIONS**WAREHAM****Federal Aid Project No. FAP No. STP-0035(068)X
Corridor Improvements on Route 6 at Swifts Beach Road**

Labor participation goals for this project shall be 15.3% for minorities and 6.9% for women for each job category. The goals apply to both contractor's and subcontractor's on-site construction workforce. Refer to document 00820 for details.

SCOPE OF WORK

The work done under this contract consists of furnishing all necessary labor, materials, equipment, and services to construct roadway improvements on Marion Road (Route 6). The project begins approximately 300' north of the intersection with Cromesett Road at Sta. 3+00 and ends approximately 125' north of the intersection with Viking Drive at Sta. 45+00. The length of the project is 0.795 mile. The proposed roadway section will reduce the number of lanes from four to two. A 10' shared use path will be constructed on the south side of the project. Work includes traffic signal improvements at the intersections of: Marion Rd at Swifts Beach Rd and Marion Rd at Wareham Plaza. The work also includes, but is not limited to, installation of signs and supports, full depth pavement construction, pavement milling and resurfacing, granite curbing, hot mix asphalt and cement concrete sidewalk. Also included are utility pole relocations (by others). The work also includes drainage system construction, landscaping, pedestrian curb ramps, pavement markings and all incidental costs required to complete the work shown on the plans and described herein.

All work under this Contract shall be done in conformance with the *2026 Standard Specifications for Highways and Bridges*, the *Construction Standard Details* in effect as of January 2026, the *1990 Standard Drawings for Signs and Supports*, the *2015 Overhead Signal Structure and Foundation Standard Drawings*, the *11th Edition of the Manual on Uniform Traffic Control Devices (MUTCD)* and the *January 2026 Massachusetts Amendments to the MUTCD*, the *1968 Standard Drawings for Traffic Signals and Highway Lighting*, the latest edition of *The American Standard for Nursery Stock*, the Plans and these Special Provisions.

SUBSECTION 7.05 INSURANCE REQUIREMENTS

The insurance requirements set forth in this subsection are in addition to the requirements of the Standard Specifications.

7.05.B: Public Liability Insurance 4.

Asbestos Liability Insurance shall be obtained for this project.

CONTRACTOR QUESTIONS AND ADDENDUM ACKNOWLEDGEMENTS

Prospective bidders are required to submit all questions to the Construction Contracts Engineer by 3:00 P.M. on the Tuesday of the previous week before the scheduled bid opening date. Any questions received after this time will not be considered for review by the Department.

Contractors should email questions and addendum acknowledgements to the following email address massdotspecifications@dot.state.ma.us The MassDOT proposal number and municipality is to be placed in the subject line.

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION FILE NUMBER SIGN

This project is subject to Massachusetts General Laws, Chapter 131, Section 40 as amended. Signs shall be in accordance with the latest MassDOT Construction Standards. All costs for the manufacture, erection, maintenance, moving, and removal of the signs shall be absorbed by the contractor with no additional compensation other than the contract unit prices.

For this project the Massachusetts Department of Environmental Protection File Number is SE076-2892.

CONTAMINATED SOIL

Soil to be removed from the project area shall not be assumed to be uncontaminated, and must be evaluated prior to off-site management for potential contamination with hazardous materials. **No soil may be disposed of off-site without proper assessment by the contractor and approval from the Resident Engineer (RE), District Environmental Engineer (DEE), or the project designee.**

PROJECT 610647-SUMMARY OF POTENTIALLY IMPACTING CONDITIONS

The following is a summary of the information obtained during the file review for the release sites at 204 Marion Road and 127 Marion Road.

RTN 4-371, 204 Marion Rd, Dave's Alignment Center

- The site is currently occupied by a gasoline and service station, as it has been since at least 1939.
- Contamination was first identified on the site in 1987, after petroleum impacted soils were discovered during the removal of two underground storage tanks (USTs).
- Further investigation found ethylene dibromide (EDB), naphthalene, lead, and aliphatic and aromatic volatile petroleum hydrocarbons (VPH) in groundwater and benzene, toluene, ethylbenzene, and methyl tert-butyl ether in soil and groundwater.
- Contaminated soil was found at depths ranging from two to seven feet below grade (bg).
- Groundwater near or within the project area was found at depths ranging from four to 12 feet bg.
- Cleanup activities included the operation of a soil vapor extraction (SVE) system and a groundwater recovery/treatment system.
- A C-1 RAO was submitted for the site in 1998.
- Current activity on the site consists of Monitored Natural Attenuation (MNA).
- Any excavation to a depth of four feet or greater on the 204 Marion Road property, located in the vicinity of Sta 15+50, may encounter contaminated groundwater.
- Any excavation to a depth of two feet or greater on the portion of the 204 Marion Road facing Swifts Beach Road may encounter contaminated soil.

RTN 4-16871, 127 Marion Rd, Wareham Plaza

- The site is currently occupied by a medical facility. In the past it has been occupied by a liquor store and a gasoline service station.
- Environmental sampling in 2001 identified gasoline-related compounds in groundwater.
- Groundwater is found at depths ranging from three to seven feet bg.
- Further investigation found limited areas of soil and groundwater VPH contamination.
- Cleanup activities consisted of the excavation and removal of contaminated soil.
- An A-2 RAO was submitted for the site in 2005.
- The site includes the portions of the 207 Marion Road property located between Sta 32+00 and Sta 34+50.
- Based on the specific locations of known contamination, the project should not be impacted by this site. However, the contractor must be aware that they are operating within the boundaries of a known release site and be especially attentive to signs of contamination.

HOLIDAY WORK RESTRICTIONS*(Supplementing Subsection 7.09)*

The District Highway Director (DHD) may authorize work to continue during these specified time periods if it is determined by the District that the work will not negatively impact the traveling public. DHD may allow work in those areas on a case by case basis and where work is behind barrier and will not impact traffic

Below are the holiday work restrictions:

New Years Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on the day before until the normal start of business on the next subsequent business day. No work on local roadways on the holiday without permission by the DHD and the local police chief.

Martin Luther King's Birthday (Federal Holiday)

No work restrictions due to traffic concerns, however work on local roadways requires permission by the DHD and local police chief.

President's Day (Federal Holiday)

No work restrictions due to traffic concerns, however work on local roadways requires permission by the DHD and local police chief.

Evacuation Day (Suffolk County State Holiday)

No work restrictions due to traffic concerns.

Patriot's Day (State Holiday)

Work restrictions will be in place for Districts 3 and 6 along the entire Boston Marathon route and any other locations that the DHD in those districts determine are warranted so as to not to impact the marathon. All other districts work restrictions will be as per DHD.

Mother's Day

No work on Western Turnpike and Metropolitan Highway System from 5:00 AM on the Friday before, until the normal start of business on the following day.

Memorial Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on the Friday before, until the normal start of business on the following day.

Bunker Hill Day (Suffolk County State Holiday)

No work restrictions due to traffic concerns.

Juneteenth

No work restrictions due to traffic concerns, however work on local roadways requires permission by the DHD and local police chief.

HOLIDAY WORK RESTRICTIONS (Continued)**Independence Day (Federal Holiday)**

No work on major arterial roadways from 5:00 AM on the day before until the normal start of business on the next subsequent business day. No work on local roadways on the holiday without permission by the DHD and the local police chief.

Labor Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on the Friday before, until the normal start of business on the following day.

Columbus Day (Federal Holiday)

No work on major arterials from 5:00 AM on the Friday before, until the normal start of business on the following day

Veterans' Day (Federal Holiday)

No work restrictions due to traffic concerns.

Thanksgiving Day (Federal Holiday)

No work on major arterials from 5:00 AM two days before until the normal start of business on the following Monday.

Christmas Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on the day before until the normal start of business on the next subsequent business day.

2026 FIFA WORLD CUP – BOSTON, MASSACHUSETTS

The 2026 FIFA World Cup will be held at Gillette Stadium in Foxborough, related events, and significant tourist events such as Sail Boston and the 250th Anniversary of the United States will be held throughout the region. Matches and Fan Fest and other possible 250th Celebration activities are scheduled through June, July and August 2026. The District will be imposing work and/or traffic restrictions as necessary to minimize impacts during these periods when, as determined by MassDOT, the Contractor's operations could impact vehicular traffic, particularly on interstate highways and major arterials throughout the region and local roads near event sites. No additional compensation will be allowed for work restrictions except as determined under Subsection 8.10. nor will the Contractor have any claim for related costs, direct or indirect. The Contract time determinations have accounted for potential work restriction during this period and Contractor's should plan accordingly. Any necessary or emergency work required during this time will require District approval.

SUBSECTION 8.02 SCHEDULE OF OPERATIONS

Replace this subsection with the following:

An integrated cost and schedule controls program shall be implemented by the Contractor to track and document the progress of the Work from Notice to Proceed (NTP) through the Contractor Field Completion (CFC) Milestone. The Contractor's schedules will be used by the Engineer to monitor project progress, plan the level-of-effort required by the Department's work force and consultants and as a critical decision-making tool. Accordingly, the Contractor shall ensure that it complies fully with the requirements specified herein and that its schedules are both accurate and updated as required by the specification throughout the life of the project. Detailed requirements are provided in Division II, Section 722 Construction Scheduling.

TRUCK SAFETY DEVICES

(Supplementing Subsection 7.04: Motor Vehicles)

All motor vehicles subject to Section 7 of Chapter 90 to be operated under this Contract shall be equipped with safety devices as provided therein and in 540 CMR 4.00.

By December 31, 2025, the Contractor shall certify to the Registry of Motor Vehicles, in a manner prescribed by the Registrar, that all applicable vehicles are equipped with Lateral Protective Devices, Convex Mirrors, Cross Over Mirror(s) and Back Up Cameras in accordance with the requirements of 540 CMR 4.00.

The Contractor shall provide evidence satisfactory to the Department to demonstrate compliance with the above certification requirement for all applicable vehicles operated under this Contract by the Contractor and its subcontractors and vendors in a manner set forth by the Department. Thereafter, the Contractor shall have an affirmative obligation to continue to provide such evidence of compliance on an ongoing basis and no later than 7 days after certification with the Registry of Motor Vehicles of any additional vehicles operated under this Contract by the Contractor and its subcontractors and vendors.

Non-compliance with respect to a vehicle that is subject to 540 CMR 4.00 may subject the Contractor to statutory fines as established in M.G.L. c. 90, § 7 and/or contractual remedies up to and including termination of the Contract.

SUBSECTION 8.14 UTILITY COORDINATION, DOCUMENTATION, AND MONITORING RESPONSIBILITIES

A. GENERAL

In accordance with the provisions of Section 8.00 Prosecution and Progress, utility coordination is a critical aspect to this Contract. This section defines the responsibility of the Contractor and MassDOT, with regard to the initial utility relocation plan and changes that occur as the prosecution of the Work progresses. The Engineer, with assistance from the Contractor shall coordinate with Utility companies that are impacted by the Contractor's operations. To support this effort, the Contractor shall provide routine and accurate schedule updates, provide notification of delays, and provide documentation of the steps taken to resolve any conflicts for the temporary and/or permanent relocations of the impacted utilities. The Contractor shall provide copies to the Engineer of the Contractor communication with the Utility companies, including but not limited to:

- Providing advanced notice, for all utility-related meetings initiated by the Contractor.
- Providing meeting minutes for all utility-related meetings that the Contractor attends.
- Providing all test pit records.
- Request for Early Utility work requirements of this section (see below).
- Notification letters for any proposed changes to Utility start dates and/or sequencing.
- Written notification to the Engineer of all apparent utility delays within seven (7) Calendar Days after a recognized delay to actual work in the field – either caused by a Utility or the Contractor.
- Any communication, initiated by the Contractor, associated with additional Right-of-Way needs in support of utility work.
- Submission of completed Utility Completion Forms.

B. PROJECT UTILITY COORDINATION (PUC) FORM

The utility schedule and sequence information provided in the Project Utility Coordination Form (if applicable) is the best available information at the time of the bid and has been considered in setting the contract duration. The Contractor shall use all of this information in developing the bid price and the Baseline Schedule Submission, inclusive of the individual utility durations sequencing requirements, and any work that has been noted as potentially concurrent utility installations.

C. INITIATION OF UTILITY WORK

The Engineer will issue all initial notice-to-proceed dates to each Utility company based on either the:

- 1) Contractor's accepted Baseline Schedule
- 2) An approved Early Utility Request in the form of an Early Utility sub-net schedule (in accordance with the requirements of this Subsection)
- 3) An approved Proposal Schedule

C.1 - BASELINE SCHEDULE – UTILITY BASIS

The Contractor shall provide a Baseline Schedule submission in accordance with the requirements of Subsection 8.02 and inclusive of all of the information provided in the PUC Form that has been issued in the Contract documents. This is to include the utility durations, sequencing of work, allowable concurrent work, and all applicable considerations that have been depicted on the PUC Form.

SUBSECTION 8.14 (Continued)

C.2 – EARLY UTILITY REQUEST – (aka SUBNET SCHEDULE) PRIOR TO THE BASELINE
All early utility work is defined as any anticipated/required utility relocations that need to occur prior to the Baseline Schedule acceptance. In all cases of proposed early utility relocation, the Contractor shall present all known information at the pre-construction conference in the form of a ‘sub-net’ schedule showing when each early utility activity needs to be issued a notice-to-proceed. The Contractor shall provide advance notification of this intent to request early utility work in writing at or prior to the Pre-Construction meeting. Prior to officially requesting approval for early utility work, the Contractor shall also coordinate with MassDOT and all utility companies (private, state or municipal) which may be impacted by the Contract. If this request is acceptable to the Utilities and to MassDOT, the Engineer will issue a notice-to-proceed to the affected Utilities, based on these accepted dates.

C.3 – PROPOSAL SCHEDULE - CHANGES TO THE PUC FORM

If the Contractor intends to submit a schedule (in accordance with MassDOT Standard Specifications, Division I, Subsection 8.02) that contains durations or sequencing that vary from those provided in the Project Utility Coordination (PUC) Form, the Contractor must submit this as an intended change, in the form of a Proposal Schedule and in accordance with MassDOT Standard Specifications, Division I, Subsection 8.02. These proposed changes are subject to the approval of the Engineer and the impacted utilities, in the form of this Proposal Schedule and a proposed revision to the PUC form. The Contractor shall not proceed with any changes of this type without written authorization from the Engineer, that references the approved Proposal Schedule and PUC form changes. The submission of the Baseline Schedule should not include any of these types of proposed utility changes and should not delay the submission of the Baseline Schedule. As a prerequisite to the Proposal Schedule submission, and in advance of the utility notification(s) period, the Contractor shall coordinate the proposed utility changes with the Engineer and the utility companies, to develop a mutually agreed upon schedule, prior to the start of construction.

D. UTILITY DELAYS

The Contractor shall notify the Engineer upon becoming aware that a Utility owner is not advancing the work in accordance with the approved utility schedule. Such notice shall be provided to the Engineer no later than seven (7) calendar days after the occurrence of the event that the Contractor believes to be a utility delay. After such notice, the Engineer and the Contractor shall continue to diligently seek the Utility Owner’s cooperation in performing their scope of Work.

In order to demonstrate that a critical path delay has been caused by a third-party Utility, the Contractor must demonstrate, through the requirements of the monthly Progress Schedule submissions and the supporting contract records associated with Subsection 8.02, 8.10 and 8.14, that the delays were beyond the control of the Contractor.

All documentation provided in this section is subject to the review and verification of the Engineer and, if required, the Utility Owner. In accordance with MassDOT Specifications, Division I, Subsection 8.10, a Time Extension will be granted for a delay caused by a Utility, only if the actual duration of the utility work is in excess of that shown on the Project Utility Coordination Form, and only if;

SUBSECTION 8.14 (Continued)

- 1) proper Notification of Delay was provided to MassDOT in accordance with the time requirements that are specified in this Section
- 2) the utility delay is a critical path impact to the Baseline Schedule (or most recently approved Progress Schedule)

E. LOCATION OF UTILITIES

The locations of existing utilities are shown on the Contract drawings as an approximation only. The Contractor shall perform a pre-construction utility survey, including any required test pits, to determine the location of all known utilities no later than thirty (30) calendar days before commencing physical site work in the affected area.

F. POST UTILITY SURVEY – NOTIFICATION

Following completion of a utility survey of existing locations, the Contractor will be responsible to notify the Engineer of any known conflicts associated with the actual location of utilities prior to the start of the work. The Engineer and the Contractor will coordinate with any utility whose assets are to be affected by the Work of this Contract. A partial list of utility contact information is provided in the Project Utility Coordination Form.

G. MEETINGS AND COOPERATION WITH UTILITY OWNERS

The Contractor shall notify the Engineer in advance of any meeting they initiate with a Utility Owner's representative to allow MassDOT to participate in the meeting if needed.

Prior to the Pre-Construction Meeting, the Contractor should meet with all Utility Owners who will be required to perform utility relocations within the first 6 months of the project, to update the affected utilities of the Project Utility Coordination Form and all other applicable Contract requirements that impact the Utilities. The Contractor shall copy the Engineer on any correspondence between the Utility Owner and the Contractor.

H. FORCE ACCOUNT / UTILITY MONITORING REQUIREMENTS

The Engineer will be responsible for recording daily Utility work force reports. The start, suspension, re-start, and completion dates of each of the Utilities, within each phase of the utility relocation work, will be monitored and agreed to by the Engineer and the Contractor as the work progresses.

I. ACCESS AND INSPECTION

The Contractor shall be responsible for allowing Utility owners access to their own utilities to perform the relocations and/or inspections. The Contractor shall schedule their work accordingly so as not to delay or prevent each utility from maintaining their relocation schedule.

COMPLIANCE WITH THE NATIONAL DEFENSE AUTHORIZATION ACT**(Supplementing Subsection 7.01)**

On all projects, the “Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment” Regulation (2 CFR 200.216) prohibits the Contractor from using or furnishing the following telecommunications equipment or services:

- Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
- Telecommunications or video surveillance services provided by such entities or using such equipment.
- Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

This prohibition applies to all products manufactured by the aforementioned companies, including any individual components or parts.

By submitting a bid on a project, the Contractor certifies that all work will be in compliance with the terms of 2 CFR 200.216. The Contractor shall submit a COC indicating compliance with the above provisions for all telecommunications equipment or services included in the Contract.

Payment for the item in which the materials are incorporated may be withheld until these COCs are received. Any cost involved in furnishing the certificate(s) shall be borne by the Contractor.

SOIL STOCKPILING DIRECTIVE P-22-001

Any stockpiling of soil must be performed in compliance with Policy Directive P-22-001, Off-Site Stockpiling of Soil from MassDOT Construction Projects. This directive limits the allowable locations for off-site stockpiling of soil generated during MassDOT projects and includes various requirements that must be satisfied by the contractor prior to off-site stockpiling. The Contractor is responsible for identifying a suitable stockpile location.

BUILD AMERICA BUY AMERICA PREFERENCE

On Federally-aid projects the Buy America (23.CFR § 635.410) and Build America, Buy America Act. requires the following,

- (1) all iron and steel used in the project are produced in the United States--this means all manufacturing processes, from the initial melting stage through the application of coatings, must occur in the United States. Foreign steel and iron can be used if the cost of the materials does not exceed 0.1% of the total Contract cost or \$2,500, whichever is greater. The action of applying a coating to a covered material (i.e., steel and iron) is deemed a manufacturing process subject to Buy America. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to requirements of Build America, Buy America. Steel used for temporary support of excavation, including H piles, soldier piles, and sheeting when the steel is required to be left in place is subject to requirements of Build America, Buy America. Temporary steel, shall remain in place when it falls within the influence zone of the soil supporting any structure or railroad tracks.
- (2) all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States and
- (3) all construction materials are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States. “Construction materials” includes an article, material, or supply—other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives—that is or consists primarily of:
 - non-ferrous metals,
 - plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables),
 - glass (including optic glass),
 - lumber; or
 - drywall.

The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

All articles, materials, and supplies should be classified as an iron or steel product, a manufactured product, or another product as specified by law or in 2 CFR part 184 (such other products specified by law or in 2 CFR part 184 include “excluded materials” and “construction materials”); an article, material, or supply must not be considered to fall into multiple categories.

VALUE ENGINEERING CHANGE PROPOSAL

This Subsection defines the conditions and requirements which apply to Value Engineering Change Proposals (“VECPs”). The purpose of this provision is to encourage the Contractor to propose changes in certain project requirements that will maintain the project’s functional requirements at a savings in contract time, contract price, or both. The net savings obtained by using a VECP that meets the conditions and requirements set forth here will be shared by the Contractor and MassDOT.

VECP’s under this provision are to be initiated, developed and submitted to MassDOT by the Contractor. The VECP must show the contemplated changes to the Drawings, Specifications and other requirements in the Contract. When a VECP submitted pursuant to this section is fully accepted by MassDOT, the VECP will be implemented by the Contractor and paid using the current cost and resource loaded schedule. Contractor shall demonstrate that the VECP is equal to, or better than, the original design or material; that there is an interest in public safety within the VECP; that there is a life-cycle cost benefit; and/or that end users will benefit from the shortened schedule. VECPs shall be consistent with the MassHighway/MassDOT Standard Specifications for Highways and Bridges and other applicable reference documents and directives. Any proposed deviation from these documents will need to be clearly identified in the VECP Proposal Documents, and must be approved by MassDOT’s Chief Engineer before accepting this VECP.

- A. In order to be considered for MassDOT review each VECP shall:
1. Be clearly labeled pursuant to this Subsection;
 2. Yield a net savings at least two hundred and fifty thousand (250,000.00) Dollars and/or a net saving of contract completion duration of at least three (3) months;
 3. The proposed changes to contract items must:
 - a. maintain the specified items’ required functions (service life, reliability);
 - b. meet applicable safety regulations and codes;
 - c. material substitutions must be in accordance with DOT prequalified/preapproved products and must be tested in accordance with standard material specs/testing methods (and considering all relevant environmental, load, and other relevant factors).
 - d. show economy of operation, ease of maintenance, ease of construction, and necessary standardized features and appearance; and
 4. Shall not require an extension of Contract Time or Contract Milestones, with the exception of cases when there are anticipated significant cost saving.

VALUE ENGINEERING CHANGE PROPOSAL (Continued)

The thresholds above are considered to be a general guideline. MassDOT will consider VECPs outside of these thresholds if a significant benefit is demonstrated. Additionally, notwithstanding this VECP process, MassDOT will consider minor revisions in the form of a Contract Modification.

Further, any VECP submitted shall be in sufficient detail to clearly define the proposed change. The Contractor's failure to provide information of the type, detail and in a format to facilitate the MassDOT's review, may be grounds for rejection of the VECP. Additionally, the Contractor will not be entitled to any equitable adjustment or increased Time, due to any aspect of any of the proposed VECP including permitting, right of way, utility coordination or delayed responses by MassDOT. If, after the progression of the work associated with the executed Contract Modification for the VECP, any additional costs are realized by the Contractor or any of the sub-consultants, sub-contractors, or suppliers, the Contractor shall be obligated to pay for any and all costs.

B. The following initial items shall be provided by the Contractor for MassDOT's review. *Items 1-6 need to be submitted prior to the start of MassDOT's review of the VECP and item 7 is an important consideration for the pricing of the VECP and the timeline of the proposed VECP schedule.*

1. **VECP Description:** A description of the difference between the existing and the proposed Contract requirements, and the comparative advantages and disadvantages of each;
2. **VECP Change Listing:** A listing of the Contract requirements that will need to be changed, modified, or reviewed as well as the proposed Contract document changes in the Instructions to Bidders, Contract, Standard Specifications, General Requirements and Special Provisions required by the VECP.
3. **Construction Schedule Update:** Any changes in the Contract Time(s) or Contract Milestone(s), that will result from acceptance of the VECP, shall be accompanied by a contemporaneous schedule analysis (*i.e., the Contractor's baseline schedule submission, all past/required monthly schedule updates, a detailed assessment of all past delays, and a resource loaded Critical Path Method schedule as specified in Section 8.0 / Subsection 8.02 of this Contract*) of the projected Work that remains including the proposed VECP related schedule changes (*inclusive of the timeline to review accept the VECP and the timeline for implementing the design changes*) in the remaining work. This shall be submitted in the form of a Proposal Schedule until the VECP has been formally accepted. Note: All of this information is to be updated, recertified, and formally accepted by MassDOT before final acceptance of this this VECP is issued.

VALUE ENGINEERING CHANGE PROPOSAL (Continued)

4. ***Date for MassDOT's Acceptance:*** A statement that clearly justifies the date by which the VECP must be accepted to obtain the maximum price reduction, noting any effect upon the Contract Time(s) and/or Contract Milestone(s). This statement must include a narrative that demonstrates the most recent construction schedule has been utilized to justify that proposed acceptance date (*e.g. "in order to start to fabricate critical materials, authorization must be provided to work on the shop drawings by no later than [date]"*). The Contractor should allow for at least sixty (60) to ninety (90) days for acceptance by MassDOT once all of the VECP documentation has been provided. Acceptance shall mean that MassDOT has received a finalized and executed contract modification. However, this is a proposed Contract change.

The Contractor is fully obligated to progress the Work of the original Contract and MassDOT is not liable for any delays or costs that may occur in the review phase of any VECP proposal.

5. ***Cost and Savings Estimates:*** A detailed estimate of the anticipated net savings, calculated as follows:
- a. ***Original Scope:*** Isolate the cost of performing the original contract construction activities, in accordance with the original Contract Documents, as originally bid by the Contractor, that are anticipated to be superseded by the VECP. *This cost is to include any original contract scope that is anticipated to be altered or eliminated by the VECP such as, shop drawing preparation, inspection work, testing, maintenance of traffic, or any other original contract costs, that have yet to have been performed at the time of this VECP submission.*
 - b. ***New VECP Scope:*** Calculate the cost of performing the comparable construction activities associated with the VECP.
 - c. ***Contractor's Engineer & Inspection:*** Calculate the cost of engineering, inspection, and design work by the Contractor's Engineer/Designer. This should be a realistic estimate of the costs of any required engineering, design and review work by the Contractor's Engineer.
 - d. ***MassDOT's Costs:*** MassDOT's estimate of costs to perform engineering/design reviews, cost estimate reviews, schedule reviews, and any other administrative costs to review and recommend implementation of the proposed VECP. (*including all anticipated increased costs to MassDOT on other Contracts and all anticipated follow-on increased costs to MassDOT, if any*) as provided by MassDOT. MassDOT's estimated costs must be included the VECP calculation and will be provided by MassDOT in support of the VECP evaluation process.
 - e. ***Other Costs:*** Estimated costs associated with any revisions to other project related costs, such as Environmental Permits or Right of Way acquisitions, including other agency or municipality costs, as provided by MassDOT.

VALUE ENGINEERING CHANGE PROPOSAL (Continued)**Net Savings:**

The net savings to be split between MassDOT and the Contractor shall be calculated using the items above as follows: $a - (b+c+d+e) = \text{net savings}$

6. The Contractor shall also provide:

- a. A proposed Change Order, which explains and justifies any required Equitable Adjustment in the Contract Price.
- b. The Contractor's actual costs expended for developing the VECP as of the date of the VECP submission;

7. *Design Changes and Drawings:* The costs that are outlined above should be inclusive of the following design and engineering responsibilities.

- a. Design changes shall be prepared and stamped by the Contractor's professional designer and/or engineer. In addition, in the development of the VECP; the Contractor is responsible for anticipating and managing all aspects associated with any VECP design work that must be performed by a licensed Engineer.
- b. The Contractor's engineer must analyze and stamp all components of any aspect of the project that has been redesigned, changed, or altered as a result of this VECP.
- c. The Contractor's engineer shall provide all calculations and supporting design/engineering documentation that was utilized to develop the changes and stamped drawings. These will be used by MassDOT's Designer-of-Record to review the VECP changes. The Contractor is limited to selecting only those engineer's that have been pre-qualified by MassDOT's A&E Board.
- d. MassDOT's Designer-of-Record will review and respond to all completed design submissions related to this VECP within thirty (30) calendar days, unless determined to be a non-critical path item.
- e. MassDOT will be responsible for estimating and managing MassDOT's Designer-of-Record during the VECP review and implementation. Should any significant conflicts arise, between the Contractor's Engineer and MassDOT's Designer-of-Record, the DOT and the Contractor will work expeditiously to resolve the conflict. Should this type of conflict continue for greater than five (5) days, the Contractor is to bear all financial and time related impacts of such delay and must seek to resolve the design conflict, in an acceptable manner to MassDOT. The resolution of this conflict will be funded at the Contractor's expense – exclusive of the net saving that was agreed to at the execution of the contract modification for this VECP.
- f. The Contractor's Engineer may also be required to inspect the construction work. The Contractor is to include such anticipated inspection costs in the initial VECP.

VALUE ENGINEERING CHANGE PROPOSAL (Continued)

- g. MassDOT's Designer of Record will remain the Designer-of-Record for the entire Project. Any costs incurred in the use of MassDOT's Designer-of-Record by MassDOT or Contractor associated with the review of a VECP are to be included in the calculated net savings.
- C. Approval of the VECP shall not occur until a Contract Modification, incorporating the VECP, is issued by MassDOT and properly executed by the Contractor. MassDOT may accept or reject part or all of any VECP at any time prior to an executed Contract Modification for the applicable VECP. The decision of MassDOT, concerning acceptance or rejection of any VECP, shall be final and shall not be subject to dispute resolution.

It is expected that several weeks may go by before the final VECP documentation has been executed with a Contract Modification. Therefore, MassDOT intends to make certain that the initial cost estimate information has not changed before entering into a Contract Modification. As the VECP evaluation process is finalized, and prior to the signed Contract Modification for the VECP, the Contractor and MassDOT must re-certify the current status of the originally proposed cost and/or schedule savings.

Until a contract modification is issued and schedule and cost/savings re-certification is complete and accepted by MassDOT, the Contractor shall remain obligated to perform the Work in accordance with the terms and conditions of the original Contract Documents.

Upon completion of the work associated with the VECP, MassDOT may require verification that the VECP savings has been achieved.

- D. VECPs will be processed (distributed, reviewed, commented upon, accepted or rejected) expeditiously (pursuant to M.G.L. c. 30, § 39R); however, as this is an elective modification to the contract, MassDOT shall not be liable for any delay or cost in the review and acceptance of the VECP. During the review of the VECP, the Contractor remains obligated to progress the original Contract scope, and schedule, as planned; until a Contract Modification, accepting the Contractor re-certified VECP, has been executed by MassDOT.

The Contractor has the right to withdraw part, or all of any VECP, prior to acceptance by MassDOT. Such withdrawal shall be made in writing to the Engineer. The Contractor shall state the period of time, from the date of the initial VECP submittal, that the VECP shall remain valid and feasible. Revision of this validity and feasibility period shall be allowed only by mutual agreement of the Contractor and the Engineer in writing.

If the Contractor desires to withdraw the proposal prior to the expiration of this period for non-technical reason, MassDOT reserves the right to recover all actual costs that have been incurred to MassDOT.

VALUE ENGINEERING CHANGE PROPOSAL (Continued)

If the Contractor withdraws the VEC Proposal, MassDOT reserves the right to proceed with the VEC or any portion of the VEC as a normal change and the Contractor waives any right it may have had to share in net savings thereunder.

For purposes of this provision, expiration of the time established by the Contractor for approval shall be considered as withdrawal by the Contractor if MassDOT requests an extension of that time and the Contractor does not provide a written extension.

- E. With regard to unknown conditions or sub-surface work, in general, the expectation is that the Contractor and MassDOT will strive to gain enough knowledge about the risks in order to provide a forward-priced Change Proposal. Therefore, any costs to fully evaluate the proposal, such as additional borings and/or test pits, must be considered in the cost evaluation of whether the VEC is worth pursuing. However, if it is impractical to gather conclusive exploratory information, before the VEC is executed, MassDOT may consider provisions in the VEC that clearly identifies the risk sharing (cost and time) related specifically to the unknown/sub-surface conditions. If these VEC provisions are acceptable to MassDOT they are to include supplemental language to provide a determination of the final savings/cost, and time impacts, no later than 45 days after the sub-surface work is completed. All other aspects of the VEC, unrelated to these Provisions, will be binding upon execution of the VEC.

EMERALD ASH BORER ADVISORY

To the extent possible, all trees and brush shall be disposed on site, typically chipped and spread in place. When trees or brush must be removed, such as in urban, or otherwise populated areas, Contractor shall identify proposed location for disposal, and provide written notification to the Engineer for approval. Disposal shall be in city or town of project, or at minimum, within county, of construction operations.

NORTHERN LONG-EARED BAT PROTECTION

The U.S. Fish and Wildlife Service (USFWS) has listed the northern long-eared bat (NLEB) as endangered under the Endangered Species Act (ESA) and the following requirements exist to protect the bat and its habitat. This project has been consulted with the USFWS through the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and Federal Transit Administration (FTA) Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat revised February 5, 2018.

On July 14 to 19, 2022, Tetra Tech, on behalf of MassDOT Highway Division Environmental Services, conducted a northern long-eared bat summer presence/absence survey using acoustic detection methods, in accordance with the 2022 survey guidelines. The survey did not detect northern long-eared bat, and as stated within the survey guidelines, the survey is valid for five years.

NORTHERN LONG-EARED BAT PROTECTION (Continued)

Due to the 5-year validity of the negative presence/absence survey, it is recommended that the contractor conduct all activities that could result in stressors to the bats such as tree removal/trimming, bridge and/or structure removal/maintenance, lighting, or use of percussive, by July 14, 2027. If additional stressor producing work is proposed by the Contractor past this date, additional review is required by the MassDOT Highway Division's Environmental Services Section, and additional review and restrictions may be required by the USFWS.

Due to the negative survey results, the project is eligible for a May Affect, Not Likely to Adversely Affect (NLAA) determination, without Avoidance and Minimizations Measures (AMMs), in accordance with the FHWA, FRA and FTA Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat. On behalf of FHWA, the lead federal agency for Section 7 consultation, MassDOT submitted a Programmatic Consultation for Transportation Projects affecting NLEB or Indiana Bat to the USFWS through the Information for Planning and Consultation (IPaC) webpage and generated a NLAA documentation letter (see **Document A00871 USFWS NLAA**). Therefore, the project has completed Section 7 consultation through the Endangered Species Act, and no AMMs apply to the project.

The Contractor shall ensure all personnel working in on the project site are aware of all environmental commitments related to NLEB, including all applicable AMMs. NLEB Bat information (<https://www.fws.gov/midwest/endangered/mammals/nleb/>) shall be made available to all personnel.

WORK SCHEDULE

The Contractor and all Subcontractors on this project shall be restricted to the same eight-hour work shifts.

Normal work hours shall be 7:00 am to 3:30 pm. The contractor shall coordinate work hours with the Wareham Middle School to avoid traffic disruptions and lane takings during the morning drop-off and the afternoon pickup.

Drainage tie-ins requiring night time work hours shall be determined in coordination with the Engineer, but are estimated to be no earlier than 9:00 PM and no later than 5:30 AM, Sunday through Thursday. The Contractor shall request other work hours or additional work hours in writing and submit the request to the Engineer for approval at least ten days prior to the requested start date.

No work that in the opinion of the Engineer may cause traffic delays for any cause or reason shall be permitted during peak travel hours unless authorized by the Engineer.

The Contractor's attention is directed to the fact that work may have to be performed during hours other than the above-specified work hours when approved by the Engineer.

No additional compensation will be paid to the Contractor for such work.

ENVIRONMENTAL PERMITTING

An Order of Conditions (DEP# SE076-2892) has been obtained from the Wareham Conservation Commission under the Wetlands Protection Act. If field conditions and/or Contractor-proposed erection, demolition, storage, or other procedures not originally allowed by existing environmental permits require work to occur in or otherwise impact water or wetland resource areas, the Contractor is advised that no associated work can occur until all required environmental permits have been either amended or obtained allowing such work. The Contractor must notify the District 5 Highway Director and Resident Engineer in writing at least 60 days prior to desired commencement of the proposed activity. All environmental submittals, including any contact with Local, State, or Federal environmental agencies, must be coordinated with the District 5 Environmental Engineer. The Contractor is expected to fully cooperate with requests for information and provide same in a timely manner. The Contractor is further advised that the Department will not entertain a delay claim due to the time required to modify or obtain the environmental permits.

PROVISIONS FOR TRAFFIC AND PROSECUTION OF THE WORK

Before starting any work under this contract the Contractor shall prepare, and submit to the Engineer for approval, a plan that indicates the traffic routing proposed by the Contractor during the various stages and time periods of the work and the temporary barricades, signs, drums, and other traffic control devices to be employed during each stage and time period of the work to maintain traffic and access abutting properties.

Traffic control devices required only during working hour operations shall be removed at the end of each working day.

Unless otherwise authorized by the Engineer, two-way traffic shall be maintained on all sections at all times on two-way streets. The work areas shall at least have a gravel surface with ramps at all access driveways to the adjacent properties.

The satisfactory access for emergency vehicles shall be maintained at all times. Temporary grade transition ramps shall be provided at the end of work areas for emergency vehicle movements in the areas of construction.

The Town of Wareham Police and Fire Departments as well as the School Department shall be notified of any temporary closing of traveled ways.

At the end of each day's activities or when work is not in progress, the Contractor shall leave the roadways in a condition such that each abutter has acceptable vehicular and pedestrian access to their property.

The roadway in milled areas, if any, must be thoroughly swept to ensure the removal of all loose materials before the area is opened to traffic.

PROVISIONS FOR TRAFFIC AND PROSECUTION OF THE WORK (Continued)

Portable Changeable Message Signs shall be operated on the Marion Road (Route 6) approaches to the work zone 7 days prior to the approved work schedule to alert the public regarding proposed roadway detour or other traffic restrictions.

At the end of each working day where trenches in areas of public travel are covered with steel plates, each edge of the plates shall be either beveled or protected by a hot mix asphalt ramp at a slope of 2 feet horizontal to 1 inch vertically. Any temporary patching material may be used to construct the ramps. The cost of necessary patching materials and their maintenance and removal will be considered included in the contract unit prices bid.

Sweeping and cleaning of surfaces beyond the limits of the project to clean up material caused by spillage or vehicle tracking during the various phases of the work shall be considered as incidental to the work being performed under the Contract and there will be no additional compensation.

BUS SERVICE

The Greater Attleboro Taunton Regional Transit Authority (GATRA) provides bus service within a portion of the project, as described below:

- Route 6 – Shaws Plaza
Link 1: Inbound and Outbound.

Inbound trips begin at Cranberry Plaza and stop at Onset Village, Agawam Village, Wareham Center, Shaw's, and end at Cromesett.

Outbound trips begin at Cromesett and stop at Cromesett Woods, Swifts Beach Road and Grant Street, Shaw's, Wareham Center, Agawam Village, Onset Village, and end at Cranberry Plaza.

Schedule:

M-F 8:00 AM – 5:00 PM

SAT 9:00 AM – 5:00 PM

SUN No service

Wareham – New Bedford Connection: Eastbound and Westbound.

Eastbound trips begin at New Bedford Terminal and stop at Southcoast Health System, Route 6 at North St. Mattapoisett, Route 6 at Route 105 Marion, Shaw's/GNB Community Health Center, Wareham MultiService Center, and end at Cranberry Plaza.

Westbound trips begin at Cranberry Plaza and stop at Wareham MultiService Center, Shaw's/GNB Community Health Center, Route 6 at Route 105 Marion, Route 6 at North St. Mattapoisett, Southcoast Health System, and end at New Bedford Terminal.

BUS SERVICE (Continued)

Schedule:

M-F (AM SERVICE): 7:30 AM – 10:30 AM

M-F (PM SERVICE): 2:00 PM – 5:00 PM

SAT No service

SUN No service

- **Cromesett Road**

Link 1: Inbound and Outbound.

Inbound trips begin at Cranberry Plaza and stop at Onset Village, Agawam Village, Wareham Center, Shaw's, and end at Cromesett.

Outbound trips begin at Cromesett and stop at Cromesett Woods, Swifts Beach Road and Grant Street, Shaw's, Wareham Center, Agawam Village, Onset Village, and end at Cranberry Plaza.

Schedule:

M-F 7:50 AM – 4:50 PM

SAT 8:50 AM – 4:50 PM

SUN No service

The contractor shall alert GATRA sixty (60) days prior to initiating any work that may affect the bus route schedule or that may disturb the bus route stop location on the project.

MAINTENANCE OF TRAFFIC SIGNALS

The Contractor shall provide all labor, materials, and equipment for the total maintenance of all existing and proposed temporary and permanent traffic signal equipment within the project limits, including damage by automobile accidents. These provisions will apply to all signalized locations included as part of this contract from the date of written notice given to the Engineer that the Contractor will work on or adjacent to an existing signal until the date when the Massachusetts Highway Department accepts the completed project. This written work notice must be given before the Contractor may proceed with any work on a traffic signal system. For this paragraph the phrase "traffic signal equipment" is intended to include, but is not limited to, controllers, detectors, signal housing, supporting structures, cabinets, wire, conduit, and all other ancillary equipment used for traffic signals.

Traffic signal operation and signalized intersection approaches shall be in conformance with the MUTCD throughout construction except when the intersections are under police control. The contractor shall submit any proposed interim traffic lane and traffic signal arrangements at intersections that deviate from the existing or proposed arrangements to the Resident Engineer for approval.

The cost of maintenance of signals shall be included in the various traffic signal contract items and no additional payment will be made.

NOTICE TO OWNERS OF UTILITIES

Coordination of the work with utility companies is required. The infrastructure of several utilities requires alterations by the affected utilities.

Written notice shall be given by the Contractor to all public service corporations or officials owning or having charge of publicly or privately owned utilities of his intention to commence operations affecting such utilities at least one week in advance of the commencement of such non-emergency operations and the Contractor shall at that time file a copy of such notice with the Engineer.

Following are the names, addresses, and telephone numbers of the utilities presumed to be affected, but the completeness of the list is not guaranteed:

Comcast Cable Corporation

PO Box 6505, 5 Omni Way

Chelmsford, MA 01824

ATTN: Michael Cook & James Fitzpatrick

Michael_cook7@comcast.com

James_fitzpatrick@comcast.com

Enbridge

8 Wilson Way

Westwood, MA 02090

ATTN: Kathy M. Aruda

508-938-7728

kathleen.aruda@enbridge.com

Eversource Electric "B"

50 Duchaine Blvd.

New Bedford, MA 01745

ATTN: Ned Sadowski

413-537-6594

New.sadowski@eversource.com

Eversource Fiber

247 Station Drive

Mail Stop: SUM SE 320

Westwood, MA 02090

ATTN: Bechir Khoury

781-441-3864

Bechir.khoury@eversource.com

Mass Coastal Railroad

12 Harding Street, Unit 202

Lakeville, MA 02347

ATTN: Chris Podgurski

508-5291-2116

cpodgurski@capetrain.com

National Grid Gas

170 Data Drive

Waltham, MA 02451

ATTN: Melissa Owens

781-907-2845

Melissa.Owens@nationalgrid.com

Onset Fire Alarm

PO Box 44

Onset, MA 02558

ATTN: Raymond Goodwin

508-295-2122

Onset Fire Dist. – Water Dept

PO Box 171

Onset, MA 02558

ATTN: Paul Bokoski

508-295-0603

NOTICE TO OWNERS OF UTILITIES (Continued)**Onset Water Department**

Wareham, MA 02571

ATTN: Kevin Sampson

ksampson@onsetwater.com

Open Cape

3195 Main Street

Barnstable, MA 02630-2148

ATTN: Corinne Green

508-524-5902

Corinne@opencape.org**Verizon Wireless Small Cell**

20 Alexander Drive

Wallingford, CT 06492

ATTN: Liz Glidden

Elizabeth.glidden@verizonwireless.com

Verizon

385 Myles Standish Blvd.

Taunton, MA 02780

ATTN: Evan McSorley

774-409-3184

Evan.mcsorley@verizon.com

Wareham Fire Alarm

273 Main Street

Wareham, MA 02571

ATTN: Chief Matthew Rowley

508-295-2973

Wareham Municipal Maintenance

95 Charge Pond Road

Wareham, MA 02571

ATTN: David Menard

508-295-5300

dmenard@wareham.ma.us

Wareham Water Department

2550 Cranberry Hwy.

Wareham, MA 02571

ATTN: Andy Cunningham

508-295-0450

acunningham@warehamfiredistrict.org

Wareham Water Pollution Control Facility

Tonys Lane

Wareham, MA 02571

ATTN: Dan Meadows

508-295-6144

NATIONAL GRID EMERGENCY TELEPHONE NUMBERS**GAS:**

Emergency: 1-800-233-5325

New Service: 1- 877-696-4743

Customer Support: 1-800-732-3400

EVERSOURCE EMERGENCY TELEPHONE NUMBERS**ELECTRIC:**

Outage/ Emergency: 800-592-2000 or 844-726-7562

New Service: 1-888-633-3797 (1-888-need pwr)

Customer Support: 1-800-340-9822

COORDINATION WITH PROPERTY OWNER

Certain portions of the existing fences located at 223 Marion Road require removal to facilitate proposed work. The Contractor is required to coordinate with the property owner and provide 60 days advance notice of requiring fence removal.

DRAINAGE

The Contractor shall maintain the drainage system on the project to provide continuous drainage of travel lanes and construction areas.

Temporary adjustment to grade of drainage structures will be required by construction staging to drain travel lanes and construction areas. The Contractor shall adjust drainage structures as required by construction staging and as authorized by the Engineer to ensure that proper drainage is maintained, with payment made under the applicable drainage structure adjustment items.

All existing pipes that are 8" or greater in diameter that are to be abandoned shall be plugged with brick masonry in conformance with Standard Specifications, Section 201.62.

This work will be paid under Item 227.4.

No separate payment will be made for the maintenance of the existing drainage system, including temporary connections and pipe plugs, but all costs in connection therewith shall be included in the unit prices bid for the various Contract Items.

EQUIVALENT SINGLE AXLE LOADS (ESALS)

The estimated traffic level to be used for Superpave HMA mixture design for this contract, expressed in Equivalent Single Axle Loads (ESALs) for the design travel lane over a 20-year period is 2.6 million 18-kip (80-kn) ESALs.

BIDDERS LIST

Pursuant to the provisions of 49 CFR Part 26.11 all official bidders will be required to report the names, addresses and telephone numbers of all firms that submitted bids or quotes in connection with this project. Failure to comply with a written request for this information within 15 business days may result in a recommendation to the Prequalification Committee that prequalification status be suspended until the information is received.

The Department will survey all firms that have submitted bids or quotes during the previous year prior to setting the annual goal and shall request that each firm report its age and gross receipts for the year.

DRAINAGE STRUCTURE CONNECTIONS

Where new pipe is shown on the Drawings to be connected into an existing drainage structure to remain, the existing structures shall be first cleaned to remove all mud, debris, and other material. The existing structure wall shall be carefully and neatly cut to provide the minimum size opening required for insertion of the new pipe. The proposed pipe end shall be set or cut-off flush with the inside face of the existing structure wall and the remaining space around the pipe completely filled with cement grout for the full thickness of the structure wall. Existing shaped inverts shall be reconstructed as necessary to provide a smooth and uniform flow channel from the new pipe through the existing structure.

No separate payment will be made for the cost of connecting new pipes into existing structures, or necessary alterations of existing structures, but all costs in connection therewith shall be included in the unit prices bid for the various pipe items.

Where new structures shown on the plans are to connect to existing pipes to remain, the remaining pipe shall be cleaned from the new structure to the next structure downstream. The existing pipe or pipes shall be carefully cut or removed to allow the installation of the new drainage system. The existing pipe end shall be cut off flush with the inside face of the proposed structure wall and the remaining space around the pipe completely filled with red brick set in cement grout for the full thickness of the structure wall.

No separate payment will be made for the cost of connecting existing pipes to new structures, but all costs in connection therewith shall be included in the unit price bid for the various structure items. If new pipe or pipe section are required to extend the existing line to and through the new structure wall, the new pipe will be paid for under the unit price per foot established under that item.

Removal of the drainage structure sediment and removal of the drainage pipe sediment will be paid under Items 227.3 and 227.31 respectively.

NONCONFORMING COMPRESSIVE STRENGTH OF CEMENT CONCRETE

Concrete with compressive strength test results failing to attain the limits specified in Table 901.64-3 of 901.64.B: Acceptance Testing shall be evaluated for structural adequacy and serviceability at the Contractors' expense. The Department will review all production records, the concrete test records, petrographic analysis report, field notes, and the placement records for the concrete in question. If the Engineer determines the material is found to be adequate to remain in place, payment shall be adjusted in accordance with the following formula:

$$P = \frac{2(fc - f'c)(UP)(Q)}{f'c}$$

Where:

P = pay adjustment for substandard concrete

f'c = specified minimum compressive strength at 28 days

fc = substandard concrete cylinder compressive strength at 56 days

Q = quantity of concrete represented by the acceptance cylinders tested

UP = unit contract price or the lump sum breakdown price per cubic yard for the class of concrete involved complete in place

ITEM 102.001**TREE TRIMMING CREW****DAY**

The purpose of this Item is to provide tree work separate from and in addition to clearing and selective clearing operations for construction of the path. Work under this item shall occur after installation of the path pavement. The work under this Item shall conform to the relevant provisions of Subsection 101 of the Standard Specifications and the following:

The work to be performed under this Item shall consist of trimming/pruning trees not paid for separately and shall include the removal of trees, hanging limbs, downed trees/limbs, and/or any leaning trees which pose a risk to the path user as required by the Engineer.

All pruning and tree work shall be in conformance with the most current version of the American National Standards Institute (ANSI) Standard Z-133.1 and A300 Standard Practices for Tree, Shrub, and Other Woody Plant Maintenance.

Tree work shall be by certified arborists and shall conform to the requirements of the ANSI A300. Submit qualifications to MassDOT Landscape Design. Qualified Arborists shall have a Massachusetts Certified Arborist, or International Society of Arboriculture Tree Worker Certification, or equivalent.

All cut trees/limbs shall be flush cut at their base or trunk and removed from the State Highway Limits unless otherwise directed. All wood chip material shall be removed from the site and disposed per the Standard Specifications, unless otherwise directed by the Engineer.

The minimum crew shall consist of the following: a supervisor and three tree-trimmers/laborers. The crew shall be equipped with all necessary equipment needed to complete the work including, powered lift equipment/tree truck, pickup trucks, chippers, gas powered chain saws, hand saws, pole saws, brush butters, loppers, shears, pruners, branch trimmers, ladders, tree-climbing equipment, shovels, dump vehicle with attached box container, log truck, etc.

All work performed under this Item shall be supervised by a Massachusetts Certified Arborist, International Society of Arboriculture Tree Worker, or equivalent, with proof of certification submitted to the Engineer prior to the commencement of work.

METHOD OF MEASUREMENT

Item 102.001 will be measured for payment by the Day, for time spent on the project doing actual tree trimming/removal work by the tree trimming crew and shall NOT include travel time to and from the Contractor's place of business.

Each period of 8 hours during which tree trimming crew is working will be measured as one day.

BASIS OF PAYMENT

Item 102.001 will be paid for at the Contract unit price per Day, which price shall include all labor, materials, equipment, the offsite transport and disposal of cut trees or other vegetation, the cost of all arrangements and methods required to protect from harm all existing overhead or underground installations, and all incidental costs required to complete the work.

ITEM 102.2**TREE TRIMMING****LUMP SUM**

The work under this item shall conform to the relevant provisions of Subsections 8.08 and 101 of the Standard Specifications.

The work consists of removing all living, dead, dying, broken and certain other limbs and branches in areas adjacent to proposed overhead wire relocations, highway lighting, traffic signals, traffic signage, other areas as described on the plans, and as required by the Engineer from trees located within the limits of the Project and the satisfactory disposal of all such removed debris.

Tree trimming shall be done as directed by the Engineer. Any tree trimming for overhead wire relocations shall meet the current requirements of each Utility. Prior to commencing work the Contractor shall verify each location with the Utility Companies.

All pruning and tree work shall be in conformance with the most current version of the American National Standards Institute (ANSI) Standard Z-133.1 and A300 Standard Practices for Tree, Shrub, and Other Woody Plant Maintenance.

All tree trimming work within 10 feet of energized power lines and equipment shall be in conformance with the most current version of the United States Department of Labor (DOL) OSHA Standard 1910.269(r) along with subsections (1) through (8).

All work under this Item will be performed or supervised by the Massachusetts Certified Arborist.

Contractor shall be required to provide a crew, consisting of a bucket truck with operator and grounds man for pruning and removal. The minimum crew shall consist of the following: a supervisor and three tree-trimmers/laborers. The crew shall be equipped with all necessary equipment needed to complete the work including, but not limited to, pickup trucks, chippers, gas powered chain saws, hand saws, loppers, shears, pruners, branch trimmers, ladders, tree-climbing equipment, etc. Fuel for equipment shall also be considered incidental to this Item. The crew shall be OSHA certified as line-clearance tree trimmers in order to work within 10 feet of energized power lines and equipment.

SUBMITTALS

Prior to start of work, the Contractor shall submit to the Engineer the name, certification number and resume of the Massachusetts Certified Arborist referenced herein. Cost for Certified Arborist for all activities pertaining to this Item shall be incidental to this Item.

Incidental to this Item, the Contractor shall provide to the Engineer one (1) copy of the most current version of the American National Standards Institute (ANSI) Standard Z-133.1 and A300 Standard Practices for Tree, Shrub, and Other Woody Plant Maintenance, Part 1: Pruning. These references shall be kept by the Engineer at his/her office for the length of the Contract.

Prior to start of work, the Contractor shall coordinate with the MassDOT Landscape Design Section, the Electric Utility Company, and the Utility Company with pole set in the field to confirm number, location, and extent of selective tree trimming.

ITEM 102.2 (Continued)**DESCRIPTION OF WORK**

Line-clearance Tree Trimming: Shall be defined as the pruning, trimming, repairing, maintaining, removing, or clearing of trees or the cutting of brush that is near (within 10 feet of) energized power lines.

TREE: Shall be defined as having a diameter of 4 inches or over, measured at a point 3 feet above the average ground.

LIMBS AND BRANCHES: Shall be defined as wood having a diameter of ½ inch or over and wood that has a diameter of less than ½ inch shall be considered a TWIG.

A DYING LIMB OR BRANCH: May have live growth at some point but shall be removed if found to be in an unhealthy condition.

While it is not the intent that every dead, dying and/or broken twig be removed from trees requiring trimming, the tree worker will be required to remove all such twigs accessible in the areas of the tree in which he/she is working.

If required by the Engineer, specific trees or parts thereof which are so located that damage may result from dropping shall be reduced by rope or cable lowering.

Tree shaping may be required on trees, where up-branching done under this contract has distorted the natural symmetry of the tree. Tree shaping shall consist of the removal of limbs and branches from other locations of the tree where removal is desirable to restore natural symmetry.

All sucker growth on all tree trunks within the limits of the contract shall be removed from the ground level to the beginning of the main branch system.

Any and all trees, branches, or brush conflicting with utility poles, equipment, overhead wires, and service connections, shall be removed and/or cut back using best practices to satisfy the requirements of all Utilities with an attachment to the pole line.

Any and all branches extending directly below a street luminaire as to limit the light reaching the street or path/sidewalk surfaces shall be removed and all branches shall be cut back to afford a minimum of 5-foot clearance on all sides of the luminaire. The path/sidewalk surface shall be considered as the area from the edge of the roadway surface to the edge of the path/sidewalk surface farthest from the roadway.

By cutting NEARLY, but not quite, flush with the trunk, limb or branch, the "collar" is left at the top of the wound (in the crotch of the union). This will permit the callus growth to cover the wound in a shorter period of time.

BASIS OF PAYMENT

Item 102.2 will be measured and paid for at the Lump Sum Bid Price and is considered full compensation for all labor, certifications, materials, equipment, apparatus, tools and incidentals necessary for the satisfactory completion of the work.

ITEM 102.511 TREE PROTECTION – ARMORING AND PRUNING EACH

The work under this item shall conform to the relevant provisions of Subsection 771 of the Standard Specifications and the following:

Tree protection – armoring and pruning shall be used for instances where construction activity (the use of heavy equipment), comes within proximity to potentially damage tree trunk(s) or limbs.

The work shall include the furnishing and installing of temporary tree trunk protection, minor limb pruning, or removal of lower tree limbs to prevent injury to the tree from construction equipment and activities; as shown on the Drawings; and/or as required by the Engineer.

REFERENCES

If requested, the Contractor shall provide to the Engineer one copy of the latest edition of the American National Standards Institute (ANSI) A300 Standard Practices for Tree, Shrub, and Other Woody Plant Maintenance: Part 1-Pruning and Part 5-Construction Management Standard. Provision of reference shall be incidental to this item.

MATERIALS

Trunk armoring shall be such that it prevents damage to the trunk from construction equipment. Material used for trunk armoring or mounting shall be such that installation and removal shall not damage the trunk.

Acceptable trunk armoring materials shall include two by four (2x4) wood cladding, mounted with wire or metal strapping, or when duration of construction activities is less than three months, slotted corrugated plastic pipe, mounted with duct tape. Eight (8) ounce untreated burlap shall be used to wrap the tree trunk prior to installation of cladding.

Alternative armoring methods or materials may be acceptable if approved by the Engineer.

The height of tree trunk cladding shall be measured from the base of the tree (including root flare) to the bottom of the first branch, or to a height of eight (8) feet, or as may be required by the Engineer.

METHODS OF WORK

Prior to construction activities, the Engineer, Contractor, and the Arborist (if item is included in the contract), shall review trees noted on the Drawings to be protected. Final decision and selection of trees to be armored and/or pruned shall be per the Engineer.

Care shall be taken to avoid damage to the bark during installation and removal of armoring. Trunk armoring shall be maintained such that it is effective for as long as required or replaced when materials are found to be damaged or ineffective, as determined by the Engineer. Replacement, if required, shall be incidental to the work. Armoring shall be removed immediately upon completion of work activities adjacent to the protected tree(s).

ITEM 102.511 (Continued)

Pruning of limbs shall conform to the techniques and standards of the most recent ANSI A300 standards.

DAMAGES OR LOSS

If trees designated for protection under this item are damaged, including root damage from unapproved trespassing onto the root zone, the Contractor shall, at his own expense, secure the services of an Arborist, described in Item 102.55. The Arborist shall be approved by MassDOT.

If, based on the recommendation of the Arborist, the Engineer determines that damages can be remedied by corrective measures, such as repairing trunk or limb injury; soil compaction remediation; pruning; soil injection fertilization; and/or watering; the damage shall be repaired as soon as possible, within the appropriate season for such work and according to industry standards.

If, based on the recommendation of the Arborist, the Engineer determines that damages are irreparable, or that the damages are such that the tree is sufficiently compromised to pose a future safety hazard, the tree shall be removed. Tree removal shall include cleanup of all wood, grinding of the stump to a depth sufficient to plant a replacement tree or plant, removal of all chips from the stump site, and filling the resulting hole with topsoil. Such tree removal(s), grinding, debris removal, and topsoil filling, shall be at the Contractor's expense.

Tree removal from improper or inadequate tree protection shall result in the Engineer assessing the Contractor monetary damages consistent with industry standards for assessed value and/or replacement.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 102.511 will be measured and paid at the contract unit price per EACH tree to be armored and pruned. This will include full compensation for all labor, equipment, materials, and incidentals for the satisfactory completion of the work and the subsequent removal and satisfactory disposal of the protective materials upon completion of the contract or as required by the Engineer.

Payment for work under this item will be scheduled as follows:

- 40% of the value shall be paid upon installation of trunk armoring and completion of pruning work, if required.
- 60% of the value shall be paid at the end of construction operations that would potentially damage the tree and after protection materials have been removed and properly disposed of by the Contractor. In the event of repairable damages, payment shall be made after the completion of remediation measures.

No separate payment will be made for costs of remedial actions, including Arborist services, tree removal, but all costs in connection therewith shall be included in the Contract unit price bid.

Tree damages assessed, due to lack of or improper tree and plant protective measures being taken, shall be deducted from the contract price of the work.

ITEM 102.513**TREE PROTECTION – AIR EXCAVATION
AND ROOT PRUNING****SQUARE FOOT**

Item 102.513 Tree Protection - Air Excavation and Root Pruning is for the services of excavating soil with an air pressure tool in order to expose tree roots, and for associated services and materials necessary to complete the work of pruning, backfilling with existing soil, watering, mulching, and fertilizing. This item shall include the furnishing and operating the air excavating tool. Trees requiring this item are as follows: 32" tree – Sta 19+55, Rt. 36" tree – Sta 19+90, Rt. 24" tree – Sta 25+70, Rt. 60" tree – Sta 34+55, Rt.

Associated Item: All references to Arborist herein shall refer to the Arborist under Item 102.55 Arborist. Arborist shall meet the requirements as specified under that Item and shall be compensated under that Item.

Trees to be air spaded shall be those shown on the plans and/or as determined necessary by the Engineer per the recommendations of the Arborist.

REFERENCES

The standards from American National Standards Institute (ANSI): A300 (Part 8)-2013 Root Management with special attention to Section 84 shall apply to this work. If requested, the Contractor shall provide to the Engineer one copy of this reference. Provision of reference shall be incidental to this item.

METHODS

Air excavation and pruning work shall be performed by or overseen by the Arborist.

Air excavation of soil and root pruning shall occur any time prior to equipment work within the root zone of marked trees.

Air excavation shall be done along the limit of proposed excavation. Trench shall be of sufficient width to observe and cut roots and shall be to the depth of proposed excavation. Immediately following air excavation, roots shall be pruned.

Following pruning, roots shall immediately be fully covered with backfill and immediately watered. Roots shall continue to be watered and fertilized as directed by the Arborist.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 102.513 will be measured and paid per square foot where air spading, pruning, watering, and fertilizing are performed. This item will include full compensation for all labor, equipment, materials, and incidentals required for the satisfactory completion of the work.

Arborist services shall be per Item 102.55 Arborist and compensated under that Item.

ITEM 102.521**TREE AND PLANT PROTECTION FENCE****FOOT**

The work under this Item shall conform to the relevant provisions of Subsections 644 and 771 of the Standard Specifications and the following:

Work under this item shall consist of furnishing, installing, and maintaining tree and plant protection fence(s) in a vertical and taut position; removing and resetting fencing as may be required; and final removal of protection fence(s) at the completion of construction activities, or as otherwise required by the Engineer.

The purpose of the fencing is to signify a construction work-free zone and physical barrier, thereby preventing damage to tree roots, tree trunks, soil, and all other vegetation within this delineated Tree and Plant Protection Zone (TPPZ), as shown on the Drawings, as required by the Engineer, and as described herein.

Protection shall be for the duration of the construction activities unless otherwise required by the Engineer.

MATERIALS

Tree and plant protection fence(s) shall provide a minimum forty-eight (48) inch tall barrier, that remains vertical and taut. The Fence shall be orange plastic safety fence (recommended where high visibility is necessary), or wooden snow fencing, or other approved material. Posts and anchoring materials shall be incidental to the work.

Per requirements of the Engineer, additional posts, deeper post depths, and/or additional attachments shall be used if the fabric or fence sags, leans or otherwise is not providing visible or physical protection to the TPPZ.

REFERENCES

If requested, the Contractor shall provide to the Engineer one copy of the American National Standards Institute (ANSI) A300 Standard Practices for Tree, Shrub, and Other Woody Plant Maintenance Part 1, Pruning and Part 5, Construction Management Standard. Provision of reference shall be incidental to this item.

ESTABLISHMENT OF THE TPPZ

Fencing shall be used to delineate and establish the TPPZ, adjacent to construction areas, staging areas, stockpile areas, as shown on the Drawings, and/or as required by the Engineer.

Fencing shall be located as close to the work zone limit and as far from tree trunk(s) and plants as possible to maximize the area to be protected. Fence shall run parallel and adjacent to construction activity to create a barrier between the work zone and the root zone or designated limit of plants and soils to be protected.

ITEM 102.521 (Continued)

When construction activities surround (or have the potential to surround) trees or plants to be protected, a circular enclosure shall be used.

In these instances, the TPPZ limit shall be the drip line of each tree or as close as possible to the drip line, and/or as shown on the Drawings. The drip line is defined as the outermost limit of tree canopy.

The Contractor shall not engage in any construction activity within the TPPZ without the approval of the Engineer. Activities may include operating, moving, or storing equipment, supplies, or materials; and locating temporary facilities, including trailers or portable toilets. Accessing or traversing the TPPZ shall not be permitted.

METHOD OF WORK

TPPZ fencing shall be installed prior to any construction work or staging activities. Fence(s) shall be repositioned where and as necessary for optimum tree and plant protection. Repositioning shall be incidental to this item. TPPZ fencing shall not be moved without prior approval by the Engineer.

The TPPZ shall be protected at all times from compaction of the soil; damage of any kind to trunks, bark, branches, leaves, and roots of all plants; and contamination of the soil with construction materials, debris, silt, fuels, oils, and any chemicals substance.

After construction activities are completed, or when required by the Engineer, fencing, stakes, and other anchoring materials, if any, shall be removed and disposed off-site by the Contractor.

REQUIRED WORK WITHIN THE TPPZ

In the event that grading, trenching, utility work, or storage is unavoidable within the TPPZ, the Engineer shall be notified. Measures may be required for tree protection and preservation, including air spading; the use of six (6) inch depth of wood chips or approved matting for root protection; pruning of branches; and/or trunk protection. These protection measures shall be paid under applicable contract items.

Landscaping work specified within the TPPZ shall be accomplished by hand tools. Where handwork is not feasible, with permission of the Engineer, work shall be conducted with the smallest mechanized equipment necessary.

TREE AND PLANT INJURY OR LOSS

If the TPPZ is encroached by construction activity without approval, at the discretion of the Engineer, the Contractor may be required to provide a more durable barrier (e.g., Jersey Barriers, chain link fence (if not already in use) to secure the area. Costs of furnishing and installing additional or more durable barrier(s) shall be borne by the Contractor.

In such cases of encroachment, soils shall be considered compacted and tree root injury will be assumed. Action shall be taken as specified below.

In the event that trees designated for protection under this item are injured, including root injury from unapproved trespassing onto the root zone, the Contractor shall, at his own expense, secure the services of an Arborist, described under Item 102.55. The Arborist shall be approved by MassDOT.

ITEM 102.521 (Continued)

In the event of spills, compaction or injury, the Contractor shall take corrective action immediately using methods approved by the Engineer, in coordination with the Arborist.

If, based on the recommendations of the Arborist, the Engineer determines that injuries can be remedied by corrective measures, such as repairing trunk or limb injury, soil compaction remediation, pruning, and/or watering; the injury shall be repaired as soon as possible, within the appropriate season for such work, and according to industry standards.

If, based on the recommendations of the Arborist, the Engineer determines that injuries are irreparable, or that the injuries are such that the tree is sufficiently compromised to pose a future safety hazard, the tree shall be removed. Tree removal shall include cleanup of all wood, grinding of the stump to a depth sufficient to plant a replacement tree or plant, removal of all chips from the stump site, and filling the resulting hole with topsoil. Such tree removal(s), grinding, debris removal, and filling, shall be at the Contractor's expense.

Tree removal from improper or inadequate protection of the TPPZ shall result in the Engineer assessing the Contractor monetary damages consistent with industry standards for assessed value and/or replacement.

Shrubs removals from improper or inadequate protection of the TPPZ shall be replaced with plants of similar species and equal size or the largest size plants reasonably available. The Engineer shall approve the size, quality, and quantity of the replacement plant(s). Each replacement shall include a minimum of one year of watering and establishment care, specified under Section 771.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Tree and Plant Protection Fence will be measured by the FOOT, complete in place, by the length along the top of the fence.

Tree and plant protection fence will be paid for under the contract unit price per FOOT, complete in place and shall include all materials, labor, and equipment required to furnish, install, anchor, maintain, and remove the fence upon completion, as described herein. Posts, temporary footings, anchoring and removal upon completion, shall be incidental to this item.

No separate payment will be made for costs of remedial actions, including addition of more durable barriers, Arborist services, tree or plant removal, shrub replacement and establishment, but all costs in connection therewith shall be included in the Contract unit price bid.

Tree damages assessed, due to lack of or improper tree and plant protective measures being taken, shall be deducted from the contract price of the work.

Payment for work under this item will be scheduled as follows:

- Forty (40) percent of the value payment will be made upon installation of fencing.
- Sixty (60) percent of the value payment will be made when fencing materials have been maintained to function as specified, for the intended duration, and removed and disposed off-site at the completion of protection measure requirement.

ITEM 102.533**TREE CARE – WATERING****GALLON**

The work under this item shall conform to the relevant provisions of Subsections 440 and 771 of the Standard Specifications and the following:

The purpose of this item is to provide watering for tree care during and after root pruning as directed by the Arborist. Watering shall occur during daytime hours only.

MATERIALS

Water shall be water from an approved source.

SUBMITTALS

Schedule for watering shall be determined in consultation with the arborist. Expected schedule shall be submitted to the Engineer. Source of the water shall be approved by the Engineer and included in the submittal.

Contractor shall submit metered record of water used or other measure approved by the Engineer. Record must show date of watering and quantity used.

METHODS

At least one day prior to watering on site, the contractor shall notify the Engineer.

Watering equipment shall be approved by the Engineer prior to watering under this item. Equipment shall be such that there is no water leaking from the tank, hoses, or any other parts. Water shall be pumped and have a minimum flow of 95 PSI. Gravity fed watering shall not be accepted under this item.

If water runs off root zone area due to slope, too high a flow rate, slow infiltration, or any other reason, water will not be approved for payment.

Watering method shall not damage plants or seeded areas or cause erosion. All damages shall be repair at the Contractor's expense.

MEASUREMENT AND PAYMENT

Item 102.533 shall be measured by the Gallon and shall be based on the submittals described herein. Payment shall be for all labor, equipment, and materials to complete the work specified.

Item 102.533 will be paid for at the Contract unit price per Gallon which price shall include all labor equipment, materials and incidental costs required to complete the work.

ITEM 102.55**ARBORIST****HOUR****DESCRIPTION**

The work under this Item is for the services of a Certified Arborist. Arborist shall be an International Society of Arboriculture (ISA) Certified Arborist or a Massachusetts Certified Arborist. The Arborist shall have at least 10 years of experience in tree care, including tree protection during construction, and shall demonstrate a familiarity with the American National Standards Institute (ANSI) A300 Standard Practices for Tree, Shrub, and Other Woody Plant Maintenance Part 1 Pruning, Part 5 Construction Management Standards, and Part 9 Tree Risk Assessment.

The Arborist's general responsibilities include protecting high priority trees within and adjacent to the project limits, stating areas, and access routes; recommending removal of diseased, damaged or otherwise unhealthy trees that pose a potential safety hazard; evaluating effects of construction on future health of trees close to proposed work; and recommending and/or overseeing tree work and care.

The Arborist for this item shall not be from the same company as the company responsible for selective clearing or tree removal work.

For projects with multiple phases, projects where construction activities (work or stockpiling) shifts, or when otherwise directed by the Engineer, the Arborist shall re-evaluate conditions and provide follow-up recommendations.

SUBMITTALS

- Contractor shall submit to the Engineer for approval by MassDOT Landscape Design the qualifications and experience of the Arborist. Submittal shall include copy of current certification and a resume summarizing specific construction experience (including relevant MassDOT projects) for a minimum of five projects.
- Arborist's Report documenting recommendations shall be submitted to the Engineer and an electronic copy forwarded to MassDOT Landscape Design Section. Report shall include the following:

SCOPE OF WORK

The Arborist shall be responsible for the following tasks:

- Initial Evaluation and Report
 - recommend and prioritize trees that require removal as appropriate to contract scope, project limits, and project intent;
 - review and modify, if necessary, tree protection measures shown on the drawings
 - review and mark limits of protective fencing for trees and groups of trees to be retained;
 - review and recommend protection measures for high priority trees;
 - submit a marked-up Construction Plan that briefly notes recommendations and decisions made in the field;
 - submit a corresponding report including photo documentation;

ITEM 102.55 (Continued)

- Oversight
 - direct or execute pruning of branches and/or roots, air spading, and/or other tree care operations
- Monitoring and Inspections
 - periodically inspect fencing and ensure root zones are properly protected and clear of equipment and materials as required by the Engineer
 - reevaluate tree protection measures for various phases of a project
 - submit inspection notes with relevant and dated photos to the Engineer.
- Special Care
 - oversee tree pruning for health and aesthetics
 - recommend fertilization and amendments
 - recommend and oversee pest control

METHODS

Prior to any work, the Arborist shall walk the site with the Contractor, the Engineer, the Town Tree Warden, and, if specified, the MassDOT Landscape Architect, to review trees, limits of construction activities, and other concerns. Where required for proper assessment of tree impacts, limits of work shall be staked or otherwise marked in the field prior to the site walk.

Trees to be removed shall be painted or otherwise marked.

Trees to be retained shall be marked such that it does not mar or damage the tree and such that marker is not easily removed. As applicable to the work and scope of the project, trees designated for removal or to be retained shall be noted on the plan and/or in the arborist's report and photographed.

Trees designated to remain that are damaged or removed by construction activities shall be noted and photographed for inclusion in inspection reports submitted to the Engineer.

MEASUREMENT AND BASIS OF PAYMENT

Item 102.55 will be measured for payment by the Hour of time spent onsite.

Item 102.55 will be paid at the contract unit price per hour upon submittal and acceptance of Reports described above.

ITEM 141.1**TEST PIT FOR EXPLORATION****CUBIC YARD**

The work under this Item shall conform to the relevant provisions of Subsection 140 of the Standard Specifications and the following:

Test pit locations shall be pre-marked and affected utilities notified in advance. Verification of utility locations shall be made with survey instruments that establish coordinates and elevation to the project datum. The utility location information identified via test pit findings shall be documented illustrating the size, dimensions, and elevations of the utility.

The pavement surface disturbed by the test pit excavation shall be neatly cut in straight lines to the limits of disturbance after completion of backfill.

METHOD OF MEASUREMENT

Item 141.1 will be measured for payment by the cubic yard of test pit for excavation.

BASIS OF PAYMENT

Item 141.1 will be paid for at the Contract unit price per cubic yard, which price shall include all labor, materials, equipment, and all incidental costs required to complete the work. The pavement surface shall be patched, with pavement paid for under Item 472. where the patch is temporary. Permanent patches shall be paid for under Item 451.

ITEM 146.1 **DRAINAGE STRUCTURE REMOVED AT CULVERT** **EACH**

The work under this Item shall conform to the relevant provisions of Subsection 140 of the Standard Specifications and the following:

The work shall consist of removing drainage structures on top of the culvert at locations shown on the plans.

The opening at the top of existing culvert where the existing drainage structure is removed shall be completely sealed with a minimum depth precast concrete slab designed for HS-25 loading that extends laterally (relative to the orientation of the culvert) to the full width of the culvert including the full width of the two culvert walls and extends longitudinally to cover the opening and overlap on to the culvert top beyond the existing opening by 6". The slab shall be fully seated in a bed of mortar and the slab edges running laterally across the culvert shall be finished with a mortar fillet to the full depth of the slab.

METHOD OF MEASUREMENT

Item 146.1 will be measured for payment by the unit each for Each drainage structure removed at culvert, complete.

BASIS OF PAYMENT

Item 146.1 will be paid for at the Contract unit price Each, which price shall include all labor, materials, equipment, removal of drainage structure at culvert, furnishing and installing the slab, and all incidental costs required to complete the work.

No separate payment will be made for preparation at the top of the existing culvert that is required to provide a smooth clean surface to which the mortar bed will adhere, but all costs in connection therewith shall be included in the Contract unit price bid.

No separate payment will be made for additional excavation and backfill that is required to expose the top of the existing culvert and to install the precast concrete slab, but all costs in connection therewith shall be included in the Contract unit price bid.

Full depth pavement required above the backfill will be paid for under the respective Contract pavement items.

ITEM 180.01 ENVIRONMENTAL HEALTH AND SAFETY PROGRAM LUMP SUM

The work shall consist of ensuring the health and safety of the Contractor's employees and subcontracting personnel, the Engineer, their representatives, the environment, and public welfare from any on-site chemical contamination present in air, soil, water and sediment.

The Contractor shall prepare and implement a site-specific Environmental Health and Safety Plan (EHASP) which has been approved and stamped by a Certified Industrial Hygienist (CIH) and includes the preparer's name and work experience. The EHASP shall include appropriate components required by OSHA Standard 29 CFR 1910.120(b) and the Massachusetts Contingency plan (MCP) 310 CMR 40.0018 and must comply with all applicable state and federal laws, regulations, standards and guidelines, and provide a degree of protection and training appropriate for implementation on the project. The EHASP shall be a dynamic document with provision for change to reflect new information, new practices or procedures, changing site environmental conditions or other situations which may affect site workers and the public. The EHASP shall be developed and implemented independently from the standard construction HASP required to work on all MassDOT construction projects.

Health and safety procedures provided by the Contractor shall comply with all the appropriate regulations that address employee working conditions, including but not limited to standards established by OSHA and National Institute for Occupational Safety and Health (NIOSH). Equipment used for the purpose of health and safety shall be approved by and meet pertinent standards and specifications of the appropriate regulatory agencies.

A copy of the most up-to-date version of the EHASP shall be maintained on-site at all times by the Contractor. The on-site copy shall contain the signature of the Engineer and each on-site employee of the MassDOT, Contractor, and Subcontractors involved with on-site activities. The employee's signature on the EHASP shall be deemed prima facie evidence that the employee has read and understands the plan. Updated copies of signature sheets shall be submitted to the Engineer.

The EHASP shall specify a Contractor Site Safety and Health Officer responsible for implementation of the EHASP and to oversee all construction activities, including handling, storage, sampling and transport, which require contact with or exposure to potentially hazardous materials.

The level of protection, required to ensure the health and safety of on-site personnel will be stipulated in the EHASP. The Site Safety and Health Officer shall implement the EHASP based on changing site and weather conditions, type of operation or activity, chemical compounds identified on-site, concentration of the chemicals, air monitoring data, physical state of the hazardous materials, potential duration of exposure to hazardous materials, dexterity required to perform work, decontamination procedures, necessary personnel and type of equipment to be utilized.

During implementation of the EHASP, a daily log shall be kept by the Site Safety and Health Officer and a copy shall be provided weekly to the Engineer. This log shall be used to record a description of the weather conditions, levels of personal protection being employed, screening data and any other information relevant to on-site environmental safety conditions. The Site Safety and Health Officer shall sign and date the daily log.

ITEM 180.01 (Continued)**METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Preparation and implementation of the Environmental Health and Safety Program, including the monitoring, protection and storage of all contaminated materials, as well as subsequent modifications to the EHASP, will be measured and paid for at the Lump Sum Bid Price.

Payment of 50% of the Environmental Health and Safety Program contract price will be made upon the initial acceptance of the EHASP by the Engineer. Payment of the remaining 50% of the Environmental Health and Safety Program contract price will be made upon completion of the work. The bid price shall include preparation and implementation of the EHASP as well as the cost for its enforcement by the Site Safety and Health Officer along with any necessary revisions and updates. The work of implementing the Environmental Health and Safety Program includes work involving, but not limited to, the monitoring, protection, and storage of all contaminated materials.

ITEM 180.02**PERSONAL PROTECTION LEVEL C UPGRADE****HOURL**

The work shall consist of providing appropriate personal protective equipment (PPE) for all personnel in an area either containing or suspected of containing a hazardous environment.

Contingencies for upgrading the level of protection for on-site workers will be identified in the EHASP and the Contractor shall have the capability to implement the personal protection upgrade in a timely manner. The protective equipment and its use shall follow the EHASP and all appropriate regulations and/or standards for employee working conditions.

Personal Protection Level C Upgrade will be measured and paid only upon upgrade to Level C and will be at the contract unit price, per hour, per worker, required in Level C personal protection. No payment will be made to the Contractor to provide Level D PPE.

ITEM 180.03**LICENSED SITE PROFESSIONAL SERVICES****HOUR**

Within limited areas of the project site, media (i.e. soils, sediments, surface water and/or groundwater) requiring evaluation and/or management under the Massachusetts Contingency Plan (MCP) may be encountered. A Licensed Site Professional (LSP) shall be required to provide the services necessary to comply with the requirements of the MCP. These services may include a site walk, field screening, sampling, analysis and characterization of potentially contaminated media, preparation and implementation of Immediate Response Action (IRA) Plans, Utility-Related Abatement Measure (URAM) and Release Abatement Measure (RAM) Plans, Imminent Hazard Evaluations, status reports, transmittal forms, release notification forms, risk assessments, completion statements, and related documents required pursuant to the MCP. LSP services shall also be necessary to temporarily move material generated on the project to an off-site storage location.

The name and qualifications of the LSP and all environmental technicians to be assigned to the project shall be submitted to the Engineer for approval at least four weeks prior to initial site activities. The LSP shall have a current, valid license issued by the Massachusetts Board of Registration of Hazardous Waste Site Cleanup Professionals. The LSP shall have significant experience in the oversight of MCP activities at active construction sites. Qualification packages for the LSP and each technician shall include a resume, all recent work assignments with responsibilities identified (previous 5 years), and applicable training and certifications. A list of all Notices of Noncompliance, Notice of Audit Findings and Enforcement Orders issued by the Massachusetts Department of Environmental Protection (DEP) shall be submitted for all work assignments listed for the LSP and environmental technicians. Upon approval of the LSP Qualifications, the LSP will be designated as the LSP of Record unless MassDOT designates in writing otherwise. The LSP of Record will serve as the primary point of contact for all hazardous material matters on the project.

The LSP shall evaluate soil and/or sediment with discoloration, odor, elevated field screening results, presence of petroleum liquid or sheen on the groundwater surface, or any abnormal gas or materials in the ground which are known or suspected to be oil or hazardous materials. Excavated soil and sediment which is suspected of petroleum contamination shall be field screened using the jar headspace procedures according to established DEP Guidance. All field screening equipment must be pre-approved by the Engineer. The LSP shall ensure proper on-site calibration of all field screening instrumentation.

The Engineer shall be contacted immediately when observations or any field screening results verify contamination requiring further analysis, and/or enhanced management of suspect media. Any enhanced management of contaminated soil to ensure proper stockpiling and storage is incidental to the LSP Services item. The LSP shall evaluate the need for confirmatory sampling prior to backfill in areas where contaminated material has been excavated and disposed off-site for compliance with applicable regulatory requirements. The Engineer shall approve the locations of the testing sites prior to the sampling.

ITEM 180.03 (Continued)

Contaminated media shall be handled in accordance with all applicable state and federal statutes, regulations, and policies. The LSP shall adequately evaluate contaminated media for compliance with the requirements of the MCP and Department Policies.

The Contractor and the LSP shall be aware of the reporting requirements for releases of oil and/or other hazardous material (OHM) as set forth in federal and state laws and regulations and both shall be held responsible for performing the work in accordance with all applicable Federal and State laws and regulations. The LSP shall maintain written records in a clear and concise tabular format which tracks the excavation, stockpiling, analysis and reuse/disposal of all known/suspect contaminated media. These records shall be up-to-date and submitted to the Engineer on a bi-weekly basis. The LSP shall review and summarize the laboratory data from any analyses performed on contaminated media in a tabular format and compare the results to applicable reporting thresholds. A report shall be delivered to the Engineer outlining the material sampling methods, laboratory analysis results, evaluation of applicable regulatory exemptions, reporting obligations, and proposed course of action. The laboratory report together with Chain of Custody forms for all analytical results shall be submitted to the Engineer within 14 days after completion of such analyses.

The LSP and Contractor shall be held responsible for the submission of all MCP-related documents to the Engineer at least 14 days in advance of any timeframe specified in the MCP and for the timely submission of data and tracking information as noted within this Item. All documents prepared under this Item must be reviewed and signed by the approved LSP. The Contractor and LSP shall be responsible for all fines, damages, and enforcement requirements imposed by applicable regulatory agencies for failure to meet regulatory and contract timeframes. No compensation will be provided for such fines, damages, and enforcement actions.

The Contractor and the LSP shall be aware of the reporting requirements for releases of oil and/or other hazardous material (OHM) as set forth in federal and state laws and regulations and shall both be held responsible for performing the work in accordance with all applicable Federal and State laws and regulations.

If the Contractor causes a release of OHM, the Contractor shall be responsible for assessing and remediating the release in accordance with all pertinent State and Federal regulations, including securing the services of a LSP, at his own expense.

The LSP shall coordinate all activities involving both MassDOT and the DEP through the Engineer. Any notification of release shall be approved by the Engineer before submittal to the DEP, except if an imminent hazard condition exists as defined in 309 CMR 4.03(4)(b).

LABORATORY TESTING IN SUPPORT OF LSP SERVICES

Laboratory testing provides for analytical testing in support of LSP services related to maintaining MCP compliance, such as delineating the extent and type of contamination present. Sampling and testing for disposal purposes are not included and are incidental to Items 181.11-181.14.

ITEM 180.03 (Continued)

In order to maintain compliance with the MCP and Department Policies or other regulatory requirements, the LSP shall request approval from the Engineer to obtain samples from various locations and depths within the project area and to perform laboratory analyses on those samples. No sampling shall be conducted without prior approval from the Engineer. The samples shall be delivered to a DEP-certified laboratory using proper chain-of-custody documentation for analyses which, depending upon site conditions and suspected and/or identified contaminants of concern, may include, but are not limited to, metals, polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, polycyclic aromatic hydrocarbons (PAHs), extractable petroleum hydrocarbons (EPHs) and volatile petroleum hydrocarbons (VPHs). Subsequent testing, depending upon initial results, may be required for Toxicity Characteristic Leaching Procedure (TCLP) analyses (EPA Method 1311) for metals.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

LSP Services for work under this item will be measured per person, per hour of service provided by LSP, Environmental Technicians and other approved personnel. Travel time shall not be included in the billable hours.

The quantity and type of laboratory tests must be approved by the Engineer beforehand. The Contractor will be reimbursed upon satisfactory written evidence of payment. The Contractor may be required to obtain cost estimates from three DEP certified laboratories for the Engineer to choose the service provider.

LSP Services will be paid at the Contractor bid price for each hour, or fraction thereof, spent to perform the work as described above. The bid price shall be a blended rate that includes the cost of the LSP, environmental technicians and other personnel, the performance of all work tasks and field screening, including required equipment, materials and instrumentation, and production of all documentation described above. All requests for payment must be accompanied by the following information: the names of the personnel associated with the work charged under LSP Services, dates and hours worked, work conducted, including, where appropriate, locations as identified on the construction plans, and a copy of the field diary for the dates submitted.

Laboratory testing will be reimbursed upon receipt of paid invoices for testing approved by the Engineer.

This item is for LSP work for compliance with the MCP and Department Policies. LSP hours and any laboratory testing related to off-site disposal of excess soil and sediment is incidental to Items 181.11-181.14 (including, but not limited to, disposal characterization, disposal package preparation, landfill acceptance, shipment paperwork preparation, field screening, and tracking). LSP hours for groundwater management (including characterization, obtaining off-site discharge permits, compliance testing, etc.) is incidental to Item 183.1.

<u>ITEM 181.11</u>	<u>DISPOSAL OF UNREGULATED SOIL</u>	<u>TON</u>
<u>ITEM 181.12</u>	<u>DISPOSAL OF REGULATED SOIL - IN-STATE FACILITY</u>	<u>TON</u>
<u>ITEM 181.13</u>	<u>DISPOSAL OF REGULATED SOIL - OUT-OF-STATE FACILITY</u>	<u>TON</u>
<u>ITEM 181.14</u>	<u>DISPOSAL OF HAZARDOUS WASTE</u>	<u>TON</u>

The work under these Items shall include the transportation and disposal of contaminated material excavated, or excavated and stockpiled. It shall also include the cost of any additional laboratory analyses required by a particular disposal facility beyond the standard disposal test set.

Excavation of existing subsurface materials may include the excavation of contaminated soils. The Contractor shall be responsible for the proper coordination of characterization, transport and disposal, recycling or reuse of contaminated soils. Disposal, recycling or reuse will be referred to as "disposal" for the purposes of this specification. However, regardless of the use of the term herein, there will be no compensation under these items for reuse within the project limits. The Contractor will be responsible for coordinating the activities necessary for characterization, transport and disposal of contaminated soils. Such coordination will include the Engineer and his/her designee overseeing management of contaminated materials. Contaminated soils must be disposed of in a manner appropriate for the soil classification as described below and in accordance with the applicable laws of local, state and federal authorities. The Contractor shall be responsible for identifying disposal facility (ies) licensed to accept the class of contaminated soils to be managed and assure that the facility can accept the anticipated volume of soil contemplated by the project. The Contractor shall be responsible for hiring a Licensed Site Professional (LSP) and all ancillary professional services including laboratories as needed for this work. The Contractor will be responsible for obtaining all permits, approvals, manifests, waste profiles, Bills of Lading, etc. subject to the approval of the Engineer prior to the removal of the contaminated soil from the site. The Contractor and LSP shall prepare and submit to the Engineer for approval all documents required under the Massachusetts Contingency Plan (MCP) and related laws and environmental regulations to conduct characterization, transport, and disposal of contaminated materials.

CLASSES OF CONTAMINATED SOILS

The Contractor and its LSP shall determine if soil excavated or soil to be excavated is unregulated soil or contaminated soil as defined in this section. Such materials shall be given a designation for purposes of reuse or disposal based on the criteria of the MCP. Soils and sediments which are not suitable for reuse will be given a designation for purposes of off-site disposal based on the characterization data and disposal facility license requirements. The Classes of Contaminated Soils are defined as follows:

ITEMS 181.11 through 181.14 (Continued)

UNREGULATED SOIL consists of soil, fill and dredged material with measured levels of oil and hazardous material (OHM) contamination at concentrations below the applicable Reportable Concentrations (RCs) presented in the MCP. Unregulated soil consists of material which may be reused (or otherwise disposed) as fill within the Commonwealth of Massachusetts subject to the non-degradation criteria of the MCP (310 CMR 40.0032(3), in a restricted manner, such that they are sent to a location with equal or higher concentrations of similar contaminants. Disposal areas include licensed disposal facilities, approved industrial settings in areas which will be capped or covered with pavement or loamed and seeded, and for purposes of this project should be reused as fill within the project site construction corridor whenever possible. The material cannot be placed in residential and/or environmentally sensitive (e.g. wetlands) areas. Under no circumstances shall contaminated soils be placed in an uncontaminated or less contaminated area (including the area above the groundwater table if this area shows no sign of contamination).

The Contractor shall submit to MassDOT the proposed disposal location for unregulated soils for approval. If such a disposal location is not a licensed disposal facility, the Contractor shall submit to the Engineer analytical data to characterize the disposal area sufficiently to verify that the unregulated material generated within the MassDOT construction project limits is equal to or less than the contaminant levels at the disposal site and meets the non-degradation requirements of the MCP. In addition, the Contractor shall provide written confirmation from the owner of the proposed disposal location that they have been provided with the analytical data for both the materials to be disposed as well as the disposal site characterization and that s/he agrees to accept this material. A Material Shipping Record or Bill of Lading, as appropriate, shall be used to track the off-site disposal of unregulated soil and a copy, signed by the disposal facility or property owner, shall be provided to the Engineer in order to document legal disposal of the unregulated material.

The cost of on-site disposal of unregulated soil within the project area will be considered incidental to the item of work to which it pertains.

REGULATED SOIL consists of materials containing measurable levels of OHM that are equal to or exceed the applicable Reportable Concentrations for the site as defined by the MCP, 310 CMR 40.0000. Regulated soil which meets the MCP reuse criteria of the applicable soil/groundwater category for this project area may be reused on site provided that it meets the appropriate geotechnical criteria established by the Engineer. Regulated Soil may be reused (as daily or intermediate cover or pre-cap contouring material) or disposed (as buried waste) at lined landfills within the Commonwealth of Massachusetts or at an unlined landfill that is approved by the Massachusetts Department of Environmental Protection (DEP) for accepting such material, in accordance with DEP Policy #COMM-97-001, or at a similar out-of-state facility. It should be noted that soils which exceed the levels and criteria for disposal at in-state landfills, as outlined in COMM-97-001, may be shipped to an in-state landfill, but require approval from the DEP Division of Solid Waste Management and receiving facility. An additional management alternative for this material is recycling into asphalt. Regulated Soils may also be recycled at a DEP approved recycling facility possessing a Class A recycling permit subject to acceptance by the facility and compliance with DEP Policy #BWSC-94-400.

ITEMS 181.11 through 181.14 (Continued)

Regulated Soil removed from the site for disposal or treatment must be removed via an LSP approved Bill of Lading, Manifest or applicable material tracking form. This type of facility shall be approved/permitted by the State in which it operates to accept the class of contaminated soil in accordance with all applicable local, state and federal regulations.

HAZARDOUS WASTE consists of materials which must be disposed of at a facility permitted and operated in full compliance with Federal Regulation 40 CFR 260-265, Massachusetts Regulation 310 CMR 30.000, Toxic Substances Control Act (TSCA) regulations, or the equivalent regulations of other states, and all other applicable local, state, and federal regulations. All excavated materials classified as hazardous waste shall be disposed of at an out-of-state permitted facility. This facility shall be a RCRA hazardous waste or TSCA facility, or RCRA hazardous waste incinerator. This type of facility shall be approved/permitted by the State in which it operates to accept hazardous waste in accordance with all applicable local, state and federal regulations and shall be permitted to accept all contamination which may be present in the soil excavate. The Contractor shall ensure that, when needed, the facility can accept TSCA waste materials i.e. polychlorinated biphenyls (PCBs). Hazardous waste must be removed from the site for disposal or treatment via an LSP approved Manifest.

MONITORING/SAMPLING/TESTING REQUIREMENTS

The Contractor shall be responsible for monitoring, sampling and testing during and following excavation of contaminated soils to determine the specific class of contaminated material. Monitoring, sampling and testing frequency and techniques should be performed in accordance with Item 180.03 – LSP Services. Additional sampling and analysis may be necessary to meet the requirements of the disposal facility license. The cost of such additional sampling and analysis shall be included in the bid cost for the applicable disposal items. The Contractor shall obtain sufficient information to demonstrate that the contaminated soil meets the disposal criteria set by the receiving facility that will accept the material.

No excavated material will be permanently placed on-site or removed for off-site disposal until the results of chemical analyses have been received and the materials have been properly classified. The Contractor shall submit to the Engineer results of field and laboratory chemical analyses tests within seven days after their completion, accompanied by the classification of the material determined by the Contractor, and the intended disposition of the material. The Contractor shall submit to the Engineer for review all plans and documents relevant to LSP services, including but not limited to, all documents that must be submitted to the DEP.

WASTE TRACKING:

Copies of the fully executed Weight Slips/Bills of Lading/ Manifests/Material Shipping Records or other material tracking form received by the Contractor from each disposal facility and for each load disposed of at that facility, shall be submitted to Engineer and the Contractor's LSP within three days of receipt by the Contractor. The Contractor is responsible for preparing and submitting such documents for review and signature by the LSP or other appropriate person with signatory authority, three days in advance of transporting soil off-site.

ITEMS 181.11 through 181.14 (Continued)

The Contractor shall furnish a form attached to each manifest or other material tracking form for all material removed off-site, certifying that the material was delivered to the site approved for the class of material. If the proposed disposition of the material is for reuse within the project construction corridor, the Contractor shall cooperate with MassDOT to obtain a suitable representative sample(s) of the material to establish its structural characteristics in order to meet the applicable structural requirements as fill for the project.

All material transported off-site shall be loaded by the Contractor into properly licensed and permitted vehicles and transported directly to the selected disposal or recycling facility and be accompanied by the applicable shipping paper. At a minimum, truck bodies must be structurally sound with sealed tail gates, and trucks shall be lined and loads covered with a liner, which shall be placed to form a continuous waterproof tarpaulin to protect the load from wind and rain.

DECONTAMINATION OF EQUIPMENT

Tools and equipment which are to be taken from and reused off site shall be decontaminated in accordance with applicable local, state and federal regulations. This requirement shall include, but not be limited to, all tools, heavy machinery and excavating and hauling equipment used during excavation, stockpiling and handling of contaminated material. Decontamination of equipment is considered incidental to the applicable excavation item.

REGULATORY REQUIREMENTS

The Contractor shall be responsible for adhering to regulations, specifications and recognized standard practices related to contaminated material handling during excavation and disposal activities. MassDOT shall not be responsible at any time for the Contractor's violation of pertinent State or Federal regulations or endangerment of laborers and others. The Contractor shall comply with all rules, regulations, laws, permits and ordinances of all authorities having jurisdiction including, but not limited to, Massachusetts DEP, the U.S. Environmental Protection Agency (EPA), Federal Department of Transportation (DOT), Massachusetts Water Resources Authority (MWRA), the Commonwealth of Massachusetts and other applicable local, state and federal agencies governing the disposal of contaminated soils.

All labor, materials, equipment and services necessary to make the work comply with such regulations shall be provided by the Contractor without additional cost to MassDOT. Whenever there is a conflict or overlap within the regulations, the most stringent provisions shall apply. The Contractor shall reimburse MassDOT for all costs it incurs, including damages and/or fines, as a result of the Contractor's failure to adhere to the regulations, specifications, recognized standard practices, etc., that relate to contaminated material handling, transportation and disposal.

ITEMS 181.11 through 181.14 (Continued)**SUBMITTALS****I. Summary of Sampling Results, Classification of Material and Proposed Disposal Option.**

The following information, presented in tabular format, must be submitted to the Engineer for review and approval prior to any reuse on-site or disposal off-site. This requirement is on-going throughout the project duration. At least two weeks prior to the start of any excavation activity, the Contractor shall submit a tracking template to be used to present the information as stipulated below. Excavation will not begin until the format is acceptable to MassDOT.

Characterization Reports will be submitted for all soil, sediment, debris and groundwater characterized through the sampling and analysis program. Each report will include a site plan which identifies the sampling locations represented in the Report. The Construction Plan sheets may be used as a baseplan to record this information.

The Sampling Results will be presented in tabular format. Each sample will be identified by appropriate identification matching the sample identification shown on the Chain of Custody Record. The sample must also be identified by location (e.g. grid number or stockpile number). For each sample, the following information must be listed: the classification (unregulated, regulated, etc.), proposed disposal option for the stockpile or unit of material represented, and, all analytical results.

Each Characterization Report will include the laboratory analytical report and Chain of Custody Record for the samples included in the Report.

II. Stockpiling, Transport, and Disposal.

At least two weeks prior to the start of any excavation activity, the Contractor shall submit, in writing, the following for review and shall not begin excavation activity until the entire submittal is acceptable to MassDOT.

Excavation and Stockpiling Protocol:

Provide a written description of the management protocols for performing excavation and stockpiling and/or direct loading for transport, referencing the locations and methods of excavating and stockpiling excavated material.

Disposal and Recycling Facilities:

1. Provide the name, address, applicable licenses and approved waste profile for disposal and/or recycling location(s) where contaminated soil will be disposed. Present information substantiating the suitability of proposed sites to receive classifications of materials intended to be disposed there, including the ability of the facility to accept anticipated volumes of material.

ITEMS 181.11 through 181.14 (Continued)

2. Provide a summary of the history of compliance actions for each disposal/recycling facility proposed to be used by the Contractor. The compliance history shall include a comprehensive list of any state or federal citations, notices of non-compliance, consent decrees or violations relative to the management of waste (including remediation waste) at the facility. Material should not be sent to facilities which are actively considered by the DEP, USEPA or other responsible agency to be in violation of federal, state or local hazardous waste or hazardous material regulations. MassDOT reserves the right to reject any facility on the basis of poor compliance history.

Transportation:

The name, address, applicable license and insurance certificates of the licensed hauler(s) and equipment and handling methods to be used in excavation, segregation, transport, disposal or recycling.

III. Material Tracking and Analytical Documentation for Reuse/Disposal.

The following documents are required for all excavation, reuse and disposal operations and shall be in the format described. At least two weeks prior to the start of any excavation or demolition activity, the Contractor shall submit the tracking templates required to present the information as stipulated below. Excavation or demolition will not begin until the format is acceptable to MassDOT.

All soils, sediments and demolition debris must be tracked from the point of excavation to stockpiling to onsite treatment/processing operations to off-site disposal or onsite reuse as applicable.

Demolition Debris:

Demolition debris must be tracked if the debris is stockpiled at a location other than the point of origin or if treatment or material processing is conducted. Identification of locations will be based on the station-offset of the location. The tracking table will identify date and point of generation, any field screening such as PID or dust monitoring, visual observations/comments, quantity, and stockpile ID/processing operation location. For each unit of material tracked, the table will also track reuse of the material on-site, providing reuse date, location of reuse as defined by start and end station, width of reuse location by offset, the fill elevation range, quantity, and finish grade for said location. For demolition debris which is not reused on site, the table will also track disposal of the material as defined by disposal date, quantity and disposal facility. The table must provide a reference to any analytical data generated for the material.

Soil/Sediment:

Soil excavation will be identified based on the station-offset of the excavation location limits. The tracking table will identify date and point of generation, any field screening such as PID or dust monitoring, visual observations, quantity, and stockpile number/location. For each unit of material tracked, the table will also track reuse of the material on-site and disposal of the material off-site using the same categories identified for demolition debris above.

ITEMS 181.11 through 181.14 (Continued)**METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Disposal of contaminated soil shall be measured for payment by the Ton of actual and verified weight of contaminated materials removed and disposed of. The quantities will be determined only by weight slips issued by and signed by the disposal facility. The most cost-effective, legal disposal method shall be used. The work of the LSP for disposal under all of these items shall be incidental to the work with no additional compensation.

ITEM 181.11 Measurement for Disposal of Unregulated Soil shall be under the Contract Unit Price by the weight, in tons, of contaminated materials removed from the site and transported to and disposed of at an approved location or licensed facility, and includes any and all costs for approvals, permits, fees and taxes, additional testing/characterization required by the facility beyond the standard disposal test set, decontamination procedures, transportation and disposal.

ITEM 181.12 Measurement for Disposal of Regulated Soil – In-State Facility shall be under the Contract Unit Price by the weight in tons of contaminated materials removed from the site and transported to and disposed of at an approved in-state facility, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization required by the facility beyond the standard disposal test set, decontamination procedures, transportation and disposal.

ITEM 181.13 Measurement for Disposal of Regulated Soil - Out-of-State Facility shall be under the Contract Unit Price by the weight in tons of contaminated materials removed from the site and transported to and disposed of at an approved out-of-state facility, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization required by the facility beyond the standard disposal test set, decontamination procedures, transportation and disposal.

ITEM 181.14 Measurement for Disposal of Hazardous Waste shall be under the Contract Unit Price by the weight in tons of hazardous waste removed from the site and transported to and disposed of at the licensed hazardous waste facility, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization required by the facility beyond the standard disposal test set, decontamination procedures, transportation and disposal.

ITEM 182.1**INSPECTION AND TESTING FOR ASBESTOS****LUMP SUM**

The work shall include the inspecting and testing of all materials suspected of containing asbestos. When any demolition is required to enable the inspection and testing of the suspected material it will be considered incidental to this Item and the Contractor must perform all asbestos handling and testing in accordance with the regulations stated below.

Dust suppression in the form of light water sprays, foams, dust suppressants and calcium chloride will be implemented as required to control dusting during any disturbance of asbestos suspected material. Alternatively, intrusive activities may be reduced or curtailed under high wind or heavy rain conditions, which in the opinion of the Health and Safety Plan (HASP) may pose a safety hazard to the workers.

The Contractor shall employ the services of a Massachusetts licensed "Asbestos Inspector" to inspect the material to determine whether or not "ITEM 182.2 REMOVAL OF ASBESTOS" is required. Should the asbestos inspector determine laboratory testing is required, a state certified laboratory shall be used to perform all necessary tests.

REGULATIONS

U.S. Department of Labor, Occupational Safety and Health Administration, (OSHA) including but not limited to:

- 29 CFR 1910 Section 1001 and 29 CFR 1926 Section 58 Occupational exposure to Asbestos, Tremolite, Anthophyllite and Actinolite, Final Rule
- 29 CFR 1910 Section 134 Respiration Protection
- 29 CFR 1926 Construction Industry
- 29 CFR 1910 Section 2 Access to Employee Exposure and Medical Records
- 29 CFR 1910 Section 1200 Hazard Communication
- 29 CFR 1910 Section 145 Specifications for Accident Prevention Signs and Tags

U.S. Environmental Protection Agency, (EPA) including but not limited to:

- 40 CFR 762, CPTS 62044, FRL 2843-9, Federal Register Vol. 50 no.134, July 12, 1985 p.28530 - 28540 Asbestos Abatement Projects Rule
- 40 CFR 61 Subpart A Regulation for Asbestos
- 40 CFR 61 Subpart M (Revised Subpart B) National Emission Standard for Asbestos

U.S. Department of Transportation 49 CFR 172 and 173

Massachusetts Department of Labor Standards Regulations, (DLS) including but not limited to:

- 454 CMR 28.00 Removal, Containment and Encapsulation of Asbestos

Massachusetts Department of Environmental Protection (DEP) including but not limited to (supplementing subsection 7.01):

ITEM 182.1 (Continued)

310 CMR 7.00, Section 7.09 Odor and Dust, Section 7.10 Noise, Section 7.15 Air Pollution
Control Regulations
310 CMR 18.00 and 19.00 Solid Waste Regulations

Massachusetts Division of Industrial Safety 45 CMR 10.00

Local Requirements including but not limited to those of Health Departments, Fire Departments and
Inspection Services Departments

Wherever there is a conflict or overlap of the above references, the most stringent provision shall
apply.

BASIS OF PAYMENT

Item 182.1 will be paid for at the Contract unit price per Lump Sum, which price shall include all
labor, materials, tools, equipment, and all incidental costs required to complete the work as described
and as required by the Engineer.

No separate payment will be made for the protection of general public, private property, the proper
inspecting and testing of the material, but all costs in connection therewith shall be included in the
Contract unit price bid.

ITEM 182.2**REMOVAL OF ASBESTOS****FOOT**

The work shall include the removal and satisfactory disposal of existing asbestos. The Contractor's attention is directed to the fact that existing asbestos shall be inspected and tested prior to removal, to determine if special removal and disposal is required. The Contractor shall follow all the rules and regulations stated in "ITEM 182.1 INSPECTION AND TESTING FOR ASBESTOS". If asbestos is present, the Contractor shall follow all the rules and regulations stated in the section "REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING MATERIALS", under this item. The Contractor should notify and coordinate his/her efforts with the proper utility accordingly.

REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING MATERIALS

This section specifies the requirements for the handling and removal of asbestos containing material. The Contractor must perform all asbestos handling and removal work in accordance with these specifications and the following additional requirements.

U.S. Department of Labor, Occupational Safety and Health Administration, (OSHA) including but not limited to:

29 CFR 1910 Section 1001 and 29 CFR 1926 Section 58
Occupational exposure to Asbestos, Tremolite,
Anthophyllite and Actinolite, Final Rule
29 CFR 1910 Section 134 Respiration Protection
29 CFR 1926 Construction Industry
29 CFR 1910 Section 2 Access to Employee Exposure
and Medical Records
29 CFR 1910 Section 1200 Hazard Communication
29 CFR 1910 Section 145 Specifications for Accident
Prevention Signs and Tags

U.S. Environmental Protection Agency, (EPA) including but not limited to:

40 CFR 762, CPTS 62044, FRL 2843-9, Federal Register Vol. 50 no.134,
July 12, 1985 p.28530 - 28540 Asbestos Abatement Projects Rule
40 CFR 61 Subpart A Regulation for Asbestos
40 CFR 61 Subpart M (Revised Subpart B) National Emission
Standard for Asbestos

U.S. Department of Transportation 49 CFR 172 and 173

Massachusetts Department of Labor Standards, (DLS) including but not limited to:

454 CMR 28.00 Removal, Containment and
Encapsulation of Asbestos

Massachusetts Department of Environmental Protection (DEP) including but not limited to
(supplementing subsection 7.01):

ITEM 182.2 (Continued)

310 CMR 7.00, Section 7.09 Odor and Dust, Section 7.10
Noise, Section 7.15 Air Pollution Control Regulations
310 CMR 18.00 and 19.00 Solid Waste Regulations

Massachusetts Division of Industrial Safety 45 CMR 10.00

Local Requirements including but not limited to those of Health Departments, Fire Departments and Inspection Services Departments

Wherever there is a conflict or overlap of the above references, the most stringent provision shall apply.

All asbestos material shall be removed and properly disposed of by a contractor or subcontractor with a current Massachusetts Abatement Contractors License issued by the Department of Labor Standards. Work shall be supervised by a competent person as required by OSHA in 29 CFR 1926 to ensure regulatory compliance. This person must have completed a course at an EPA Training Center or equivalent course in asbestos abatement procedures, have had a minimum of four years on-the-job training and meet any additional requirements set forth in 29 CFR 1926 for a Competent Person. This person must also be certified by the Commonwealth as an Asbestos Supervisor and Asbestos Project Designer as required by 454 CMR 28.00.

Asbestos removal work shall be coordinated with all other work under the contract and shall be completed prior to performing any activities which could disturb the asbestos material or produce airborne asbestos fibers.

Dust suppression in the form of light water sprays, foams, dust suppressants and calcium chloride will be implemented as required to control dusting during trenching and excavation. Alternatively, intrusive activities may be reduced or curtailed under high wind or heavy rain conditions, which in the opinion of the Health and Safety Plan (HASP) may pose a safety hazard to the workers.

NOTIFICATION AND PERMITS

The Contractor shall prepare a formal pre-notification form at least ten (10) days prior to the start of asbestos removal work. This form must be submitted to the appropriate Regional Office of the Massachusetts Department of Environmental Protection and to the U.S. Environmental Protection Agency Region I Air and Hazardous Material Division. A copy of the submitted forms must be provided to the Engineer and kept at the work site.

Prior to starting any work, the Contractor shall also obtain any required asbestos removal permit(s) from the city/town. A copy of the permit(s) must be provided to the Engineer and posted at the work site.

The Contractor shall also obtain and pay all other applicable asbestos waste transportation and disposal permits, licenses and fees.

ITEM 182.2 (Continued)**STANDARD OPERATING PROCEDURES**

The standard operating procedure shall ensure the following:

1. Proper site security including posting of warning signs and restricting access to prevent unauthorized entry into the work spaces.
2. Proper protective clothing and respiratory protection prior to entering the work spaces.
3. Safe work practices including provisions for communications; exclusion of eating, drinking, smoking, or use of procedures or equipment that would in any way reduce the effectiveness of respiratory protection or other engineering controls.
4. Proper exit practices from the work space through the showering and decontamination facilities.
5. Removing asbestos containing material in ways that minimize release of fibers.
6. Packing, labeling, loading, transporting and disposing of contaminated material in a way that minimizes or prevents exposure and contamination.
7. Emergency evacuation of personnel, for medical or safety (fire and smoke) so that exposure will be minimized.
8. Safety from accidents in the work space, especially from electrical shocks, slippery surfaces and entanglements in loose hoses and equipment.
9. Provisions for effective supervision and OSHA - specified personnel air monitoring for exposure during work.

REQUIRED SUBMITTALS

The Contractor shall submit to the Engineer the following listed items at least ten (10) calendar days prior to the start of asbestos work. No asbestos removal work activities shall commence until these items are reviewed by the Engineer, unless otherwise waived. Submittals shall be clearly labeled and in sufficient detail to enable the Engineer to form an opinion as to its conformity to the specifications.

1. Name, experience and DLS certification of proposed Supervisors and Foreman responsible for asbestos work.
2. Summary of workforce by disciplines and a notarized statement documenting that all proposed workers, by name, have received all required medical exams and have been properly trained and certified for asbestos removal work, respirator use and appropriate Massachusetts DLS, EPA and OSHA standards.

ITEM 182.2 (Continued)

3. Notarized statement that workers are physically fit and able to wear and use the type of respiratory protection proposed for the project. Notarized certification signed by an officer of the abatement contracting firm that exposure measurements, medical surveillance and worker training records are being kept in conformance with 29 CFR 1926.
4. Written plan of action and standard operating procedures (HASP) to include: location and layout of decontamination areas; sequencing of asbestos work; detailed schedule of work activities by date and interface with other project activities which affect work performance; methods used to assure safety and security; worker protection and exposure monitoring; contingency and emergency evacuation procedures; detailed description of methods to be employed to control pollution; waste handling procedures.
5. Written respiratory protection program specifying level of protection intended for each operation required by the project and details of daily inspection and maintenance elements.
6. Copies of the U.S. EPA, State and local asbestos removal pre-notification forms. If applicable, lists and copies of all permits, licenses, or manifests which will be applied for and used.
7. Name, location and applicable approval certificates for primary and secondary landfill for disposal of asbestos-containing or asbestos contaminated waste. Name, address and licenses number(s) of hauler permitted to transport waste. (Submit copies of completed manifests upon disposal).

The Contractor must provide copies of daily inspection and record logs upon request of the Engineer, at any time during project. This information will include but is not limited to work area entry data, respirator inspections and maintenance, HEPA-exhaust inspections and maintenance and other work applicable activities or reports of accidents or unusual events.

METHOD OF MEASUREMENT

ITEM 182.2 will be measured for payment by the FOOT for the complete removal and disposal of the asbestos containing material.

BASIS OF PAYMENT

Item 182.2 will be paid for at the Contract unit price per FOOT, which price shall include all labor, materials, tools, equipment, and all incidental costs required to complete the work specified above and as required by the Engineer.

No separate payment will be made for the protection of general public, private property, the proper inspecting and testing of the material, but all costs in connection therewith shall be included in the Contract unit price bid.

ITEM 183.1**TREATMENT OF
CONTAMINATED GROUNDWATER****GALLON**

This Item addresses the treatment and disposal of contaminated groundwater encountered during excavation operations. The work generally consists of furnishing the materials, equipment, labor, services, testing/sampling, waste characterization, transportation, disposal, permits and agreements necessary to perform the work required for the collection, treatment, and disposal of contaminated groundwater.

The Contractor is advised that contaminated groundwater may be encountered during dewatering activities. The levels and nature of contamination may vary depending on location and/or depth. No data has been provided in this specification indicating the types of contaminants that may be found in groundwater encountered during this work. It will be the responsibility of the Contractor to ensure that water removed during dewatering operations is treated and disposed of in accordance with all applicable laws and regulations and in accordance with this specification.

The Contractor shall monitor the quantity of groundwater collected for treatment using an in-line totalizer flowmeter or an alternate method approved by MassDOT. The Contractor shall, at all times, minimize the quantity of groundwater removed from the excavations. All groundwater determined to be contaminated will be managed in accordance with all applicable local, state, and federal regulations.

It is not the intent herein for the Department to design for or specify to the Contractor which particular treatment is to be used, if necessary. Rather, it is the Department's intent to provide guidance to the Contractor for informational and bidding purposes only. It is, therefore, the Contractor's responsibility to use a treatment method to allow him/her to meet any and all laws, regulations, policies, guidelines, and permit requirements. Treatment of contaminated groundwater for dewatering operations is generally performed using a mobile treatment trailer equipped with one or more granular-activated carbon (GAC) canisters, although other techniques are also used.

It is likely that treatment of the contaminated groundwater using granular-activated carbon will be required to complete the work under this Contract. The Methods described under Item 183.1 provides for the identification, testing, management and treatment or disposal of contaminated groundwater and shall be implemented, at a minimum and as necessary by the Contractor via Methods under Item 183.1.

The overall handling and management of contaminated groundwater is regulated under the provisions of 310 CMR 40.0000, 314 CMR 3.00 and 5.00, NPDES and other applicable laws. The unpermitted discharge of contaminated dewatering effluent into the environment (storm drain, surface water body, onto the ground) is a violation of federal and state laws and regulations.

Should dewatering of contaminated groundwater be necessary, approvals must be sought from the appropriate federal, state, or local regulatory jurisdiction. The USEPA will not specify a treatment system or method, but normally requires that the treated discharge meet Massachusetts Drinking Water Standards.

ITEM 183.1 (Continued)

The discharge standards are normally met by treating the dewatered groundwater through granular-activated carbon canisters, or similar techniques. Longer term discharges to surface waters or storm drains, and any discharges to the ground, require approval and/or issuance of a permit from the DEP Division of Water Pollution Control. The Contractor shall be responsible for applying for, paying all fees for, and obtaining all permits required for treatment and/or disposal of contaminated groundwater. Additional requirements may be mandated by local/regional sewer authorities for discharge to sanitary sewer or Publicly Owned Treatment Works (POTW). Copies of permit applications and correspondence from federal and state agencies and sewer authorities shall be supplied to the Engineer prior to dewatering activities.

EPA regulations published in the Federal Register on September 9, 2005 (70 FR 53663) require a National Pollutant Discharge Elimination System (NPDES) Remediation & Miscellaneous Contaminated Sites General Permit (RGP) for all contaminated construction site dewatering activities in Massachusetts (MAG910000) that will involve the discharge of water to classes of receiving waters designated in the Massachusetts Water Quality Standards (314 CMR 4.00).

The application requires that operators of proposed new discharges seeking coverage under this general permit submit a Notice of Intent (NOI) to EPA New England post-marked at least 14 days prior to commencement of discharge. The Contractor is solely responsible for applying for and obtaining coverage under the NPDES Remediation General Permit from EPA and, if applicable, DEP, including the costs associated with sampling and analysis of groundwater and any application fees. The Contractor is required to submit a completed copy of the NOI to the Engineer and the Director of Environmental Programs, Construction Division, 10 Park Plaza, Boston, prior to commencement of discharge.

Upon permanent cessation of the discharges authorized by the RGP, the Contractor shall be responsible for submitting a Notice of Termination (NOT) to EPA New England within 30 days of the permanent cessation. The Contractor is required to submit to MassDOT a completed copy of the NOT within 14 days of the permanent cessation of the discharges authorized by the RGP. All costs and fees associated with the submission of the NOT will be the responsibility of the Contractor.

The Contractor shall be responsible for adhering to regulations, specifications, and recognized standard practices related to contaminated groundwater handling during dewatering activities. MassDOT shall not be responsible at any time for the Contractor's violation of pertinent local, state, or federal regulations or endangerment of laborers and others. The Contractor shall comply with all rules regulations, laws, permits and ordinances of all authorities having jurisdiction including, but not limited to, Massachusetts Department of Environmental Protection (DEP), the U.S. Environmental Protection Agency (EPA), Federal Department of Transportation (DOT), Massachusetts Water Resources Authority (MWRA), the Commonwealth of Massachusetts and other applicable local, state and federal agencies governing this work.

The Contractor shall be responsible for determining compliance with the requirements of any permit and for any sampling, testing, and disposal required in connection with said permits. MassDOT and the City/Town reserve the right to collect additional samples of dewatered groundwater to determine the Contractor's compliance with the Permit's requirements. All laboratory testing is to be performed by a DEP certified laboratory for all parameters being tested.

ITEM 183.1 (Continued)

Copies of all field and laboratory testing results, reports, etc. required by the permits must be supplied to the Engineer. MassDOT, DEP, and the permit-granting agency, where applicable, reserve the right to collect additional samples of discharged groundwater to verify compliance with permit requirements.

For the purpose of these specifications and to establish a basis for the bid, it is anticipated that granular-activated carbon will be the treatment medium for dewatered contaminated groundwater. The bidder shall factor into the payment item all costs associated with the testing and analyses that may be required by the permitting agency. In addition, any laboratory testing of groundwater is to be performed by a DEP certified laboratory for the parameters being tested. Copies of all field and laboratory testing results will be supplied to the Engineer. Bid price shall also include full compensation for labor, materials, maintenance, mobilization, rental, and other related costs. Item 183.2 will be used for disposal of used granular-activated carbon canisters.

SUBMITTALS:

Prior to initiating work, the Contractor shall submit an excavation dewatering plan to the MassDOT that includes a detailed description of the approach to dewatering, a description of methodology for sealing the excavation to minimize infiltration of groundwater, if deemed applicable to the work, anticipated treatment, discharge points, sampling frequency, required permits, transporters and waste facilities complete with license numbers, permit numbers, contact person, and address and telephone number that the Contractor plans to utilize for waste disposal. The plan shall be submitted for the record.

The Contractor shall submit to MassDOT for review, the proposed methods for dewatering and groundwater treatment and disposal for the various portions of the work to be done. The review shall be for methods only. The Contractor shall remain responsible for the maintenance, performance, structural integrity, and safety of the systems installed for this work as well as regulatory compliance of the applicable local, state, and federal discharge standards. The contractor shall provide all groundwater sampling and analyses, results and reports required by all applicable local, state, and federal agencies. The Contractor shall submit to MassDOT for review all plans and documents that must be submitted to the EPA and DEP, including NOI, NOT,

treatment system analytical reports and correspondence. Copies of all permits and approvals and lab analyses and test results associated with groundwater treatment and disposal must be submitted to MassDOT within 3 days of receipt by the Contractor.

ESTABLISHMENT OF TREATMENT PROCEDURE:

Since concentrations of contaminants in groundwater cannot be easily assessed in the field, all groundwater extracted from the ground will be considered contaminated and will be initially pumped and stored into open settling tank(s) or a fractionation tank until it can be sampled and analyzed, unless otherwise directed by MassDOT. The Contractor will perform initial sampling and analyses of the groundwater to determine the need for a permit to dispose of contaminated groundwater. Based on the results of the initial sample analysis, which must be provided to the Engineer within twenty-four (24) hours of the time the samples are received by the laboratory, the Contractor will determine the necessity for treatment(s) and disposal procedures.

ITEM 183.1 (Continued)

Sampling must also be performed to meet applicable discharge criteria as set by the appropriate regulatory agencies for the permit obtained for disposal. All discharges must meet regulatory standards set forth in the permits required for discharge. For the purposes of the bidding process, it is anticipated that the treatment system will consist of sedimentation tanks, an oil water separator and liquid-phase granular activated carbon as the primary on-site treatment medium for dewatered contaminated groundwater. MassDOT may require additional treatment processes if such is determined necessary during the groundwater testing procedure. The Contractor shall integrate the additional treatment process into the treatment system, if necessary.

The Contractor shall provide all labor, equipment and appurtenances required to treat the groundwater, subject to the approval of MassDOT. Groundwater stored and tested but not requiring treatment or off-site disposal shall be discharged to a location subject to the approval of MassDOT without payment to the Contractor.

TREATMENT UNITS:

The Contractor shall furnish all labor and materials, and shall install and operate temporary groundwater treatment and disposal system(s) as necessary to treat contaminated groundwater pumped from excavations during construction activities under the Contract. Such systems shall be capable of treating groundwater to meet applicable discharge criteria as set by the appropriate regulatory agencies.

The Contractor or their Environmental Consultant shall operate, maintain, and modify the selected treatment system, and conduct the necessary monitoring and reporting of influent, midpoint, and effluent results, as required by the discharge permit for the disposal option selected.

METHOD OF MEASUREMENT:

Provide a treatment system that meets permit discharge requirements, mobilize it to the site, provide copies of laboratory analytical data indicating that the system is performing appropriately to meet permit requirements, and demobilize it from the site. This includes management and disposal of wastes generated during treatment prior to discharging such as activated carbon, etc. Work under Item 183.1 is based upon the number of gallons disposed or contaminated groundwater

pumped through the granular-activated carbon (Item 183.2) as the medium for the treatment of contaminated groundwater that is found in pipe trenches, manhole excavations, catch basin excavations, which need to be dewatered.

BASIS OF PAYMENT:

Payment shall be made at the unit price bid per gallon of groundwater pumped, stored, treated as needed and tested as required by discharge permits and regulatory requirements, which price shall be full compensation for all necessary labor and materials, mobilization, maintenance, demobilization of the appropriate unit(s), freight, rental costs, field and laboratory testing costs and permits. Costs associated with the disposal of granular-activated carbon shall be covered under Item 183.2.

ITEM 183.2**DISPOSAL OF
GRANULAR-ACTIVATED CARBON****POUND****GENERAL**

Work under Item 183.2 is based upon the disposal of used granular-activated carbon as the treatment medium for contaminated groundwater (Item 183.1) that is found during excavations in which contaminated groundwater is encountered.

BASIS OF PAYMENT

Payment shall be made at the unit price bid per pound of carbon that is properly disposed and replaced, as necessary, to meet treated water discharge requirements during dewatering operations at the site. Payment for Disposal of Granular Activated Carbon shall include compensation for all labor, equipment, materials, permits, characterization, sampling and on-site or laboratory analysis as needed or required by permits, for replacement and disposal of liquid-phase activated carbon for the on-site contaminated groundwater pumping, collection, treatment and treated water discharge system during the time period required to complete the work. No payments shall be made for replacing carbon which is spent due to the Contractor's failure to remove floating petroleum product or excess sediments prior to the groundwater entering the carbon treatment units. All other costs associated with treatment of contaminated groundwater will be covered under Item 183.1- Treatment of Contaminated Groundwater.

<u>ITEM 201.</u>	<u>CATCH BASIN</u>	<u>EACH</u>
<u>ITEM 202.</u>	<u>MANHOLE</u>	<u>EACH</u>
<u>ITEM 220.</u>	<u>DRAINAGE STRUCTURE ADJUSTED</u>	<u>EACH</u>
<u>ITEM 220.2</u>	<u>DRAINAGE STRUCTURE REBUILT</u>	<u>FOOT</u>
<u>ITEM 220.3</u>	<u>DRAINAGE STRUCTURE CHANGE IN TYPE</u>	<u>EACH</u>
<u>ITEM 220.6</u>	<u>SANITARY STRUCTURE REBUILT</u>	<u>FOOT</u>
<u>ITEM 220.7</u>	<u>SANITARY STRUCTURE ADJUSTED</u>	<u>EACH</u>
<u>ITEM 221.</u>	<u>FRAME AND COVER</u>	<u>EACH</u>
<u>ITEM 222.1</u>	<u>FRAME AND GRATE - MASSDOT CASCADE TYPE</u>	<u>EACH</u>
<u>ITEM 223.2</u>	<u>FRAME AND GRATE (OR COVER)</u> <u>REMOVED AND DISCARDED</u>	<u>EACH</u>

The work under these Items shall conform to the relevant provisions of Subsections 201 and 220 of the Standard Specifications and the following:

All frames and grates installed, adjusted, or reset under this project shall be hook and lock per 2026 MassDOT Construction Standard Details. If existing castings that are handled by the Contractor do not have hook and lock, they shall be discarded and replaced with new castings that are properly equipped with hook and lock.

Manholes shall be precast concrete. Flat top sections shall be substituted for conical sections in areas of low cover. Flat top structures shall be designed for HS-20 truck loading with ASTM A615, Grade 40 or Grade 60 steel. No additional payment will be made for flat structures.

Where new pipe is shown on the drawings to be connected into an existing drainage structure to remain, the existing structure shall be first cleaned to remove all mud, debris, and other material. The existing structure wall shall be carefully and neatly cut to provide the minimum size opening required for the insertion of the new pipe. The proposed pipe end shall be set or cut off flush with the inside face of the existing structure wall and the remaining space around the pipe completely filled with cement grout for the full thickness of the structure wall. Cleaning of existing drainage structures shall be paid for under item 227.3.

Existing shaped inverts shall be reconstructed as necessary to provide a smooth and uniform flow channel from the new pipe through the existing structure.

No separate payment will be made for the cost of connecting new pipes into existing structures and necessary alterations of existing structures, but all costs in connection therewith shall be considered incidental and included in Item 202.

Excavation limits of drainage structures to be removed and replaced with new drainage structures located within existing pavement to remain shall be neatly sawcut to the limits of excavation. Pavement shall be neatly reconstructed in kind to match the existing pavement section depth to the sawcut line after installation of the new drainage structure, with payment made under the applicable pavement items.

ITEMS 201. THROUGH 223.2 (Continued)

Structures observed to be compromised in any way shall be rebuilt according to the relevant items. Covers and grates that noticeably rock or shift when impacted by a vehicle shall be removed, cleaned (including the frame) and reset. Covers and grates that continue to rock and shift shall be replaced.

Any frames, grates, or covers that are found broken prior to the start of construction will be replaced under Item 221. or Item 222.1., depending on location. Broken castings shall become the property of the Contractor and be properly disposed of outside the contract limits. This does not relieve the Contractor of his responsibilities under Subsection 220.61, Protection of Work.

METHOD OF MEASUREMENT

Items 201. and 202. will be measured for payment per Subsection 201.80 of the Standard Specifications.

Items 220., 220.2, 220.3, 220.5, 220.7, 221, 222.1 and 223.2 will be measured for payment per Subsection 220.80 of the Standard Specifications.

Item 220.6 will be measured by the average height in feet, vertically to the nearest $\frac{1}{10}$ ft, from the bottom of rebuilt masonry to the bottom of the casting. The removal and resetting of the casting shall be incidental to the work.

BASIS OF PAYMENT

Items 201. and 202. will be paid per Subsection 201.81 of the Standard Specifications.

Items 220., 220.2, 220.3, 220.5, 220.7, 221, 222.1 and 223.2 will be paid per Subsection 220.81 of the Standard Specifications.

Item 220.6, Sanitary Structure Rebuilt will be paid for at the contract unit price per foot, which price shall include all labor, materials, equipment and all incidental costs required to complete the work.

ITEM 271.121**12 INCH PIPE REMOVED AND DISCARDED****FOOT**

The work under this item shall consist of the removal and proper disposal of drain pipe where noted on the plans. The work to be done under these items shall include all labor, materials and equipment necessary to remove and discard the existing drain pipes. The work includes all excavation, shoring, and bracing. If in situ material is unsatisfactory for backfill, payment will be made separately for these materials under the applicable pay items.

METHOD OF MEASUREMENT

Item 271.121 will be measured for payment by the foot of pipe removed and discarded off the project.

BASIS OF PAYMENT

Item 271.121 will be paid at the Contract unit price per foot, which price shall be full compensation for all labor, materials, equipment, and incidentals required to complete the work. includes all excavation, shoring, and bracing. If in situ material is unsatisfactory for backfill, payment will be made separately for these materials under the applicable pay items.

<u>ITEM 303.06</u>	<u>6 INCH DUCTILE IRON WATER PIPE (MECHANICAL JOINT)</u>	<u>FOOT</u>
<u>ITEM 309.</u>	<u>DUCTILE IRON FITTINGS FOR WATER PIPE</u>	<u>POUND</u>
<u>ITEM 347.1</u>	<u>1 INCH COPPER TUBING TYPE K</u>	<u>FOOT</u>
<u>ITEM 350.06</u>	<u>6 INCH GATE AND GATE BOX</u>	<u>EACH</u>
<u>ITEM 357.04</u>	<u>4 INCH GATE BOX</u>	<u>EACH</u>
<u>ITEM 357.06</u>	<u>6 INCH GATE BOX</u>	<u>EACH</u>
<u>ITEM 357.08</u>	<u>8 INCH GATE BOX</u>	<u>EACH</u>
<u>ITEM 357.10</u>	<u>10 INCH GATE BOX</u>	<u>EACH</u>
<u>ITEM 357.12</u>	<u>12 INCH GATE BOX</u>	<u>EACH</u>
<u>ITEM 358.</u>	<u>GATE BOX ADJUSTED</u>	<u>EACH</u>
<u>ITEM 370.4</u>	<u>12 X 6 INCH TAPPING SLEEVE, VALVE AND BOX</u>	<u>EACH</u>
<u>ITEM 376.2</u>	<u>HYDRANT – REMOVED AND RESET</u>	<u>EACH</u>
<u>ITEM 376.5</u>	<u>HYDRANT – ADJUSTED</u>	<u>EACH</u>
<u>ITEM 381.01</u>	<u>SERVICE BOX (MUNICIPAL STANDARD)</u>	<u>EACH</u>
<u>ITEM 381.3</u>	<u>SERVICE BOX ADJUSTED</u>	<u>EACH</u>

The work under these items shall conform to the relevant provisions of Subsection 301 of the Standard Specifications, the Town of Wareham Fire District Specifications (June 2025) - Document A00804, and the following:

The work under these items shall include all labor, materials, and equipment necessary to make alterations to existing water mains including pipe, pipe fittings, thrust blocks, plugs, valves, and hydrants. All gate and service boxes within the limits of construction shall be adjusted as required to be flush with proposed grades. If any of the castings are found to be unfit for continued use as determined by the Engineer, the Contractor shall remove and discard the appurtenances at no additional cost and furnish and install new boxes of the same size and type under the new box item.

The Contractor shall coordinate the work with the Town of Wareham Water and Fire Departments. No mains or services shall be shut off or worked on without authorization of the Engineer. 48-hour notice shall be given to the Town of Wareham prior to the start of work under these items. In no case shall a gate or hydrant be opened or shut without proper authorization.

ITEMS 303.06 THROUGH 381.3 (Continued)

Existing water mains shown on the plans have been compiled from available record information. This information is not guaranteed to be exact, and the Contractor shall need to verify the location, size, and type of existing pipes and appurtenances.

METHOD OF MEASUREMENT

Items 303.06 and 347.1 will be measured for payment by the foot along the axis of the pipe without deduction for the space occupied by valves, excluding however, the length occupied by new fittings.

Item 309. will be measured for payment by the pound and the quantity to be paid for shall be the weight stated on the invoice of the supplier or the manufacturer's rated weight as listed in the catalog whichever is the lesser.

Items 350.06, 357.04, 357.06, 357.08, 357.10, 357.12, 358., 370.4, 376.2, 376.5, 381.01, 381.3 will be measured for payment respectively by the unit Each.

BASIS OF PAYMENT

Items 303.06 and 347.1 will be paid for at the respective Contract unit price per foot which price shall include all labor, tools, equipment, materials, and all incidental costs required to complete the work.

Item 309. will be paid for at the Contract unit price per pound which price shall include all labor, tools, equipment, materials, and all incidental costs required to complete the work.

Items 350.06, 357.04, 357.06, 357.08, 357.10, 357.12, 358., 370.4, 376.2, 376.5, 381.01, 381.3 will be paid for at the respective Contract unit price per EACH which price shall include all labor, tools, equipment, materials, and all incidental costs required to complete the work.

The prices shall also include all disinfection, flushing, and pressure/leakage testing of the water pipeline system.

Any existing appurtenances that are damaged or not suitable for re-use shall be removed and discarded at no added cost.

Measurement and payment for crushed stone for the hydrant installation shall be made under Item 156., Crushed Stone.

Concrete thrust blocks shall be installed to the dimensions shown on the plans and at fittings and other locations as directed by the Town of Wareham, with measurement and payment made under item 903.

Payment for new boxes shall be made for gate or service valves, regardless of size.

ITEM 390. LAWN IRRIGATION SYSTEM REMOVED AND RESET EACH

All work completed under this item shall conform to the relevant provisions of Subsection 301 of the Standard Specifications and the following:

The work under this item includes all labor, materials, and equipment necessary for the removal and resetting of the irrigation systems affected by construction at the Dunkin Donuts, Dominos, and Wareham Plazas as directed by the Engineer.

All sprinkler heads within the limits of construction shall be adjusted as required to be flush with proposed grades.

If any existing parts of the Lawn Irrigation System are damaged or found to be not suitable for continued use as determined by the Engineer, the Contractor shall remove and discard the appurtenances at no additional cost and furnish and install new appurtenances of the same size and type.

Work shall include restoring the disturbed areas to their original condition. Any existing plants (bushes, flowers, etc.) shall be removed, stored, maintained, and replanted in place at no additional cost.

METHOD OF MEASUREMENT

Item 390. will be measured for payment by EACH lawn irrigation system installed removed and reset, complete in place.

BASIS OF PAYMENT

Item 390. will be paid for at the Contract unit bid price per EACH which price shall include all labor, tools, equipment, materials, and all incidental costs required to complete the work. Any plantings damaged as a result of this project shall be replaced in kind at no additional cost.

Furnishing and installing loam and seeding shall be measured and paid for under their respective items; 751., 751.1, and 765.

ITEM 697.1**SILT SACK****EACH**

Work under this item shall conform to the relevant provisions of Subsections 227 and 670 of the Standard Specifications and the following:

The work under this item includes the furnishing, installation, maintenance and removal of a reusable fabric sack to be installed in drainage structures for the protection of wetlands and other resource areas and the prevention of silt and sediment from the construction site from entering the storm water collection system. Devices shall be ACF Environmental (800)-448-3636; Reed & Graham, Inc. Geosynthetics (888)-381-0800; The BMP Store (800)-644-9223; or approved equal.

CONSTRUCTION

Silt sacks shall be installed in retained existing and proposed catch basins within the project limits and as required by the Resident Engineer.

The silt sack shall be as manufactured to fit the opening of the drainage structure under regular flow conditions, and shall be mounted under the grate. The insert shall be secured from the surface such that the grate can be removed without the insert discharging into the structure. The filter material shall be installed and maintained in accordance with the manufacturer's written literature and as directed by the Engineer.

Silt sacks shall remain in place until the placement of the pavement overlay or top course and the graded areas have become permanently stabilized by vegetative growth. All materials used for the filter fabric will become the property of the Contractor and shall be removed from the site.

The Contractor shall inspect the condition of silt sacks after each rainstorm and during major rain events. Silt sacks shall be cleaned periodically to remove and disposed of accumulated debris as required. Silt sacks, which become damaged during construction operations, shall be repaired or replaced immediately at no additional cost to the Department.

When emptying the silt sack, the contractor shall take all due care to prevent sediment from entering the structure. Any silt or other debris found in the drainage system at the end of construction shall be removed at the Contractors expense. The silt and sediment from the silt sack shall be legally disposed of offsite. Under no condition shall silt and sediment from the insert be deposited on site and used in construction.

All curb openings shall be blocked to prevent stormwater from bypassing the device.

All debris accumulated in silt sacks shall be handled and disposed of as specified in Section 227 of the Standard Specifications

COMPENSATION

Silt sacks will be measured and paid at the Contract unit price per each, complete in place, which price shall include all labor, materials, equipment and incidental costs required to complete the work. No separate payment will be made for removal and disposal of the sediment from the insert, but all costs in connection therewith shall be included in the Contract unit price bid.

ITEM 706.**BRICK WALK****SQUARE YARD**

The work under this item shall conform to the relevant provisions of Subsection 701 of the Standard Specifications and the following:

Existing brick walks shall be removed to the limits noted on the plans. The contractor shall photograph the existing undisturbed brick walk and use the image as a guide for finishing the brick walk to a similar appearance.

Brick walks shall be constructed at locations noted on the plans. Ground shall be excavated to proposed subgrade at the proposed walk location and a 6" gravel subbase shall be placed and compacted parallel to the proposed finished surface. A 2" sand base shall be placed and compacted over the gravel subbase. The surface pattern shall be cut, finished, and set in their final position to match the appearance of the existing walk.

Prior to removal of the brick walk the contractor shall determine the type and depth of foundation material in which the brick is set. If different than noted above the contractor shall match the same type to satisfactorily construct the brick walk.

Undamaged salvaged bricks may be used, new bricks shall be similar to the existing brick in appearance, including size, dimensions, color, weight, and texture.

METHOD OF MEASUREMENT

Item 706. Brick walk will be measured for payment by the square yard, complete in place.

BASIS OF PAYMENT

Item 706. Brick Walk, will be paid at the contract unit price per square yard, which price shall be full compensation for all labor, materials, equipment, and incidentals required to complete the work. No separate compensation will be made for excavation, gravel, or foundation material of any type.

ITEM 740. ENGINEER'S FIELD OFFICE AND EQUIPMENT (TYPE A) MONTH

The work under this Item shall conform to the relevant provisions of Subsection 740 of the Standard Specifications and the following:

Two computers and printer system meeting minimum requirements set forth below including installation, maintenance, power, paper, disks, and other supplies shall be provided at the Resident Engineer's Office:

All equipment shall be UL approved and Energy Star compliant.

THE COMPUTER SYSTEM SHALL MEET THE FOLLOWING MINIMUM CRITERIA OR BETTER:

Processor:	Intel, 3.5 GHz
System Memory (RAM):	12 GB
Hard Drive:	500 GB
Optical Drive:	DVD-RW/DVD+RW/CD-RW/CD+RW
Graphics Card:	8 GB
Network Adapter:	10/100 Mbit/s
USB Ports:	6 USB 3.0 ports
Keyboard:	Generic
Mouse:	Optical mouse with scroll, MS-Mouse compliant
Video/Audio	the computer system shall be capable of allow video calling and recording:
Video camera	shall be High Definition 1080p widescreen capable video calling and recording with built in microphone. The microphone system shall capture natural audio while filtering out background noise.
Audio	shall be stereo multimedia speaker system delivering premium sound.
OS:	Latest Windows Professional with all security updates
Web Browser:	Latest Internet Explorer with all security updates
Applications:	Latest MS Office Professional with all security updates Latest Adobe Acrobat Professional with all security updates Latest Autodesk AutoCAD LT Antivirus software with all current security updates maintained through the life of the contract.
Monitors:	Two 27" LED with Full HD resolution. Max. resolution 1920 x 1080
Flash drives:	2 (two) - 128GB USB 3.0
Internet access:	High Speed (min. 24 mbps) internet access with wireless router.

ITEM 740. (Continued)**THE MULTIFUNCTION PRINTER SYSTEM SHALL MEET THE FOLLOWING MINIMUM CRITERIA OR BETTER:**

Color laser printer, fax, scanner, email and copier all in one with the following minimum capabilities:

- Estimated volume 8,000 pages per month
- LCD touch panel display
- 50 page reversing automatic document feeder
- Reduction/enlargement capability
- Ability to copy and print 11" x 17" paper size
- email and network pc connectivity
- Microsoft and Apple compatibility
- ability to overwrite latent images on hard drive
- 600 x 600 dpi capability
- 30 pages per minute print speed (color),
- 4 Paper Trays Standard (RADF) (not including the bypass tray)
- Automatic duplexing
- Finisher with staple functions
- Standard Ethernet. Print Controller
- Scan documents to PDF, PC and USB
- ability to print with authenticated access protection

The Contractor shall supply a maintenance contract for next day service, and all supplies (toner, staples, paper) necessary to meet estimated monthly usage.

The Engineer's Field Office and the equipment included herein including the computer system, and printer shall remain the property of the Contractor at the completion of the project. Disks, flash drives, and card readers with cards shall become the property of the Department.

Compensation for this work will be made at the contract unit price per month which price includes full compensation for all services and equipment, and incidentals necessary to provide equipment, maintenance, insurance as specified and as directed by the Engineer.

ITEM 756. NPDES STORMWATER POLLUTION PREVENTION PLAN LUMP SUM

This Item addresses the preparation and implementation of a Storm Water Pollution Prevention Plan required by the National Pollutant Discharge Elimination System (NPDES) and applicable Construction General Permit (CGP) issued by the U.S. Environmental Protection Agency (EPA).

Pursuant to the Federal Clean Water Act, construction activities which disturb one acre or more are required to apply to the EPA for coverage under the NPDES General Permit for Storm Water Discharges from Construction Activities. The Contractor shall be fully responsible for compliance with the most recently issued CGP and any subsequent revisions. Should a fine or damages be assessed against it, or MassDOT, as a result of a local, state, or federal enforcement action due to non-compliance with the CGP, the Contractor shall take full responsibility.

The NPDES CGP requires the submission of a Notice of Intent (NOI) to the EPA prior to the start of construction (defined as any activity which disturbs land, including clearing and grubbing). There is a fourteen (14) day review period commencing from the date on which EPA enters the Notice into their database. Based on the review of the NOI, EPA may require additional information, including but not limited to, the submission of the Storm Water Pollution Prevention Plan (SWPPP) for review. Work may not commence on the project until final authorization has

been granted by EPA. Any additional time required by EPA for review of submittals will not constitute a basis for claim of delay.

In addition, if the project discharges to an Outstanding Resource Water, vernal pool, or is within a coastal ACEC as identified by the Massachusetts Department of Environmental Protection (DEP), a separate notification to DEP is required. DEP may also require submission of the Storm Water Pollution Prevention Plan for review and approval. Filing fees associated with the notification to DEP and, if required, the SWPPP filing to DEP shall be paid by the Contractor.

The CGP also requires the preparation and implementation of a SWPPP in accordance with the afore-mentioned statutes and regulations. The Plan will include the CGP conditions and detailed descriptions of controls of erosion and sedimentation to be implemented during construction. The contractor shall prepare the SWPPP and update it as necessary. The Contractor shall submit the Plan to the Engineer for approval at least four (4) weeks prior to any site activities. It is the responsibility of the Contractor to comply with the CGP conditions and the conditions of any state Wetlands Protection Act Order, Water Quality Certification, Corps of Engineers Section 404 Permit and other environmental permits applicable to the project and to include in the SWPPP the methods and means necessary to comply with applicable conditions of said permits.

It is the responsibility of the Contractor to complete the SWPPP in accordance with the EPA CGP, provide all information required, and obtain any and all certifications as required by the CGP. Any amendments to the SWPPP required by site conditions, schedule changes, revised work, regulations, construction methodologies, and the like are the responsibility of the Contractor. Amendments will require the approval of the Engineer prior to implementation.

ITEM 756. (Continued)

In addition to the CGP requirements for inspections, MassDOT requires inspection of all erosion controls and site conditions on a weekly basis. Inspections are also required at portions of sites that discharge to sediment or nutrient impaired or high quality waters per the CGP when each incidence of rainfall exceeding 0.25 inches in twenty-four hours or after snowmelt discharge from a storm event that produces 3.25 inches or more of snow within twenty-four hours occurs. The CGP requires that inspections be performed by a qualified individual as outlined in the CGP. MassDOT requires proof of completion of a 4 hour minimum sedimentation and erosion control training class current to the latest CGP. This individual can be, but not limited to, someone that is either a certified inspector, certified professional, or certified storm water inspector. The documentation shall be included as an appendix in the SWPPP. The inspector's qualifications shall be submitted to the Engineer for approval prior to beginning any work. This individual shall be on-site during construction to perform these inspections. In addition, if the Engineer determines at any time that the inspector's performance is inadequate, the Contractor shall provide an alternate inspector. Written weekly inspection forms, storm event inspection forms, and Monthly Summary Reports must be completed and provided to the Engineer. Monthly Summary Reports must include a summary of construction activities undertaken during the reporting period, general site conditions, erosion control maintenance and corrective actions taken, the anticipated schedule of construction activities for the next reporting period, any SWPPP amendments, and representative photographs.

The Contractor is responsible for preparation of the Plan, all SWPPP certifications, inspections, reports and any and all corrective actions necessary to comply with the provisions of the CGP. The Standard Specifications require adequate erosion control for the duration of the Contract. All control measures must be properly selected, installed, and maintained in accordance with manufacturer specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately or is no longer adequate, it is the responsibility of the Contractor to replace or modify the control for site conditions at no additional cost to the Department. Contractor must maintain all control measures and other protective measures in effective operating conditions and shall consider replacement of erosion controls for each construction season.

The work under this item shall also include the preparation, submission and implementation of a Flood Contingency Plan. The plan shall address the potential need for the temporary relocation of construction and auxiliary equipment situated within the 1% annual chance of flooding zone to designated upland locations above the Base Flood Elevation during flood events. The Flood Contingency Plan shall address any additional MassDEP-required information requirements, as applicable. The Flood Contingency Plan shall be submitted to the Engineer for review and approval at the same time as the SWPPP.

This Item addresses acceptable completion of the SWPPP, any revisions/amendments required during construction, preparation of monthly reports and Flood Contingency Plan. In addition, any erosion controls beyond those specified in bid items which are selected by the

ITEM 756. (Continued)

Contractor to facilitate and/or address the Contractor's schedule, methods and prosecution of the work shall be considered incidental to this item.

The CGP provides specific requirements for temporary and final stabilization. This shall be incorporated into the project schedule. The permit defines specific deadline requirements for Initial Stabilization ("immediately", i.e., no later than the end of the next work day following the day when earth-disturbing activities have temporarily or permanently ceased) and for Complete Stabilization Activities (no later than 14 calendar days after the initiation of stabilization). Stabilization criteria for vegetative and non-vegetative measures are provided in the CGP.

The CGP requires the submission of a Notice of Termination (NOT) from all operators when final stabilization has been achieved, as well as removal and proper disposal of all construction materials, waste and waste handling devices, removal of all equipment and construction vehicles, removal of all temporary stormwater controls, etc. Approval of final stabilization by the Engineer and confirmation of submission of the NOT will be required prior to submission of the Resident Engineer's Final Estimate. The permittee shall use EPA's website to prepare and submit the NOT.

BASIS OF PAYMENT

Item 756 will be paid for at the Contract unit price Lump Sum, which price shall include all labor, materials, equipment, SWPPP & Flood Contingency Plan preparation, revisions/addenda during construction, monthly reports, filing fees, and all incidental costs required to complete the work.

Payment of 50% of the Lump Sum price of this item will be made upon acceptance of the NPDES Stormwater Pollution Prevention Plan & Flood Contingency Plan.

Payment of 40% of the Lump Sum price of this item will be paid in equal monthly installments distributed across the time remaining in the accepted baseline schedule until substantial completion.

The remaining 10% of the Lump Sum price of this Item will be paid following accepted submission of a Notice of Termination (NOT) when final stabilization has been achieved.

ITEM 767.121**SEDIMENT CONTROL BARRIER****FOOT**

The work under this item shall conform to the relevant provisions of Subsections 670, 751 and 767 of the Standard Specifications and shall include the furnishing and placement of a sediment control barrier. Sediment control barrier shall be installed prior to disturbing upslope soil.

The purpose of the sediment control barrier is to slow runoff velocity and filter suspended sediments from storm water flow. Sediment barrier may be used to contain stockpile sediments, to break slope length, and to slow or prevent upgradient water or water off road surfaces from flowing into a work zone. Contractor shall be responsible for ensuring that barriers fulfill the intent of adequately controlling siltation and runoff.

Twelve-inch diameter (after installation) compost filter tubes with biodegradable natural fabric (i.e., cotton, jute, burlap) are intended to be the primary sedimentation control barrier. Photo-biodegradable fabric shall not be used.

For small areas of disturbance with minimal slope and slope length, the Engineer may approve the following sediment control methods:

- 9-inch compost filter tubes
- Straw bales which shall be trenched

No straw wattles may be used. Additional compost filter tubes (adding depth or height) shall be used at specific locations of concentrated flow such as at gully points, steep slopes, or identified failure points in the sediment capture line.

When required by permits, additional sediment barrier shall be stored on-site for emergency use and replacement for the duration of the contract.

Where shown on the plans or when required by permits, sedimentation fence shall be used in addition to compost filter tubes and straw bales and shall be compensated under that item.

Sediment control barriers shall be installed in the approximate location as shown on the plans and as required so that no excavated or disturbed soil can enter mitigation areas or adjacent wetlands or waterways. If necessary to accommodate field conditions and to maximize effectiveness, barrier locations may be shifted with approval from the Engineer. Barriers shall be in place prior to excavation work. No work shall take place outside the barriers.

MATERIALS AND CONSTRUCTION

Prior to initial placement of barriers, the Contractor and the Engineer shall review locations specified on the plans and adjust placement to ensure that the placement will provide maximum effectiveness.

Barriers shall be staked, trenched, and/or wedged as specified herein and according to the Manufacturer's instructions. Barriers shall be securely in contact with existing soil such that there is no flow beneath the barrier.

ITEM 767.121 (Continued)**COMPOST FILTER TUBE**

Compost material inside the filter tube shall meet M1.06.0, except for the following: no peat, manure or bio-solids shall be used; no kiln-dried wood or construction debris shall be allowed; material shall pass through a 2-inch sieve; and the C:N ratio shall be disregarded.

Outer tube fabric shall be made of 100% biodegradable materials (i.e., cotton, hemp or jute) and shall have a knitted mesh with openings that allow for sufficient water flow and effective sediment capture.

Tubes shall be tamped, but not trenched, to ensure good contact with soil. When reinforcement is necessary, tubes shall be stacked as shown on the detail plans.

STRAW BALES

Straw bales shall be used if shown on the plans or when specified by Orders of Condition or other permit requirements.

Bales should be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another. All bales should be either wire-bound or string-tied. Straw bales should be installed so that bindings are oriented around the sides (rather than along the tops and bottoms) of the bales in order to prevent deterioration of the bindings.

The barrier should be entrenched and backfilled. A trench should be excavated the width of a bale and the length of the proposed barrier to a minimum depth of 4 inches. The trench must be deep enough to remove all grass and other material which might allow underflow. After the bales are staked and chinked (filled by wedging), the excavated soil should be backfilled against the barrier. Backfill soil should conform to the ground level on the downhill side and should be built up to 4 inches against the uphill side of the barrier.

Each bale should be securely anchored by at least 2 stakes or re-bars driven through the bale. The first stake in each bale should be driven toward the previously laid bale to force the bales together. Stakes or re-bars should be driven deep enough into the ground to securely anchor the bales. For safety reasons, stakes should not extend above the bales but should be driven in flush with the top of the bale.

The gaps between the bales should be chinked (filled by wedging) with straw to prevent water from escaping between the bales. Loose straw scattered over the area immediately uphill from a straw bale barrier tends to increase barrier efficiency. Wedging must be done carefully in order not to separate the bales.

When used in a swale, the barrier should be extended to such a length that the bottoms of the end bales are higher in elevation than the top of the lowest middle bale to assure that sediment-laden runoff will flow either through or over the barrier but not around it.

ITEM 767.121 (Continued)**SEDIMENTATION FENCE**

Materials and Installation shall be per Section 670.40 and 670.60 of the Standard Specifications and the following:

Sedimentation fence shall only be used if shown on the plans or when specified by Orders of Condition or other permit requirements.

When used with compost filter tubes, the tube shall be placed on a minimum of 8 inches of folded fabric on the upslope side of the fence. Fabric does not need to be trenched.

When used with straw bales, an 8-inch deep and 4-inch wide trench or V-trench shall be dug on the upslope side of the fence line. One foot of fabric shall be placed in the bottom of the trench followed by backfilling with compacted earth or gravel. Stakes shall be on the down slope side of the trench and shall be spaced such that the fence remains vertical and effective.

Width of fabric shall be sufficient to provide a 36-inch high barrier after fabric is folded or trenched. Sagging fabric will require additional staking or other anchoring.

MAINTENANCE

Maintenance of the sediment control barrier shall be per Section 670.60 of the Standard Specifications or per the Stormwater Pollution Prevention Plan (SWPPP), whichever is more restrictive.

The contractor shall inspect the sediment barrier in accordance with relevant permits. At a minimum, barriers shall be inspected at least once every 7 calendar days and after a rain event resulting in 0.25 inches or more of rainfall. Contractor shall be responsible for ensuring that an effective barrier is in place and working effectively for all phases of the Contract.

Barriers that decompose such that they no longer provide the function required shall be repaired or replaced as directed. If the resulting berm of compost within the fabric tube is sufficiently intact (despite fabric decay) and continues to provide effective water and sediment control, barrier does not necessarily require replacement.

DISMANTLING & REMOVING

Barriers shall be dismantled and/or removed, as required, when construction work is complete and upslope areas have been permanently stabilized and after receiving permission to do so from the Engineer.

ITEM 767.121 (Continued)

Regardless of site context, nonbiodegradable material and components of the sediment barriers, including photo-biodegradable fabric, plastic netting, nylon twine, and sedimentation fence, shall be removed and disposed off-site by the Contractor.

For naturalized areas, biodegradable, natural fabric and material may be left in place to decompose on-site. In urban, residential, or other locations where aesthetics is a concern, the following shall apply:

- Compost filter tube fabric shall be cut and removed, and compost shall be raked to blend evenly (as would be done with a soil amendment or mulch). No more than a 2-inch depth shall be left on soil substrate.
- Straw bales shall be removed and disposed off-site by the Contractor. Areas of trenching shall be raked smooth and disturbed soils stabilized with a seed mix matching adjacent seeding or existing grasses (i.e., lawn or native grass mix).
- Sedimentation fence, stakes, and other debris shall be removed and disposed off-site. Site shall be restored to a neat and clean condition.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 767.121 will be measured and paid for at the contract unit price per foot of sediment control barrier which price shall include all labor, equipment, materials, maintenance, dismantling, removal, restoration of soil, and all incidental costs required to complete the work.

Additional barrier, such as double or triple stacking of compost filter tubes, will be paid for per foot of tube installed.

Barriers that have been driven over or otherwise damaged by construction activities shall be repaired or replaced as directed by the Engineer at the Contractor's expense.

<u>ITEM 802.42</u>	<u>4 INCH TELEPHONE CONDUIT - TYPE NM (2 BANK)</u>	<u>FOOT</u>
<u>ITEM 802.420</u>	<u>4 INCH TELEPHONE CONDUIT - TYPE NM (20 BANK)</u>	<u>FOOT</u>

The work under these Items shall conform to the relevant provisions of Subsection 800 of the Standard Specifications and the following:

The trench shall be excavated to the width and depth shown on the plans. All construction of duct banks including trench, excavation, and backfill shall conform to Verizon details and specifications. All work shall be performed by a Verizon approved Contractor. A representative from Verizon shall be present for all Telephone conduit installed.

For all conduits encased in concrete, use plastic spacers to maintain conduit spacing. Spacers shall meet Verizon specifications for design and spacing.

All trench excavation activities shall comply with all appropriate OSHA standards.

Duct bank shall have 6-inch orange warning tape installed above the concrete encasement as shown on the plans.

Conduits shall be blown clean using compressed air. Run mandrel thru each conduit to confirm viable pathway.

Woven polyester mule tape with minimum strength of 2500 lb. tensile strength to be installed within each conduit.

PVC conduits shall be Schedule 40.

Concrete encasement shall be 2,500 psi, 3/8 inch, 520 cement concrete.

METHOD OF MEASUREMENT

Items 802.42 and 802.420 will be measured for payment respectively by the FOOT of conduit installed, complete in place.

BASIS OF PAYMENT

Items 802.42 and 802.420 will be paid for at the respective Contract unit price per FOOT; which price shall be considered full compensation for all labor equipment and materials necessary to complete the work specified above, including, but not limited to, excavation, backfill, conduit, warning tape, spacers, concrete encasement.

ITEM 804.3 3-INCH ELECTRICAL CONDUIT TYPE NM-PLASTIC-(UL) FOOT

The work under this item shall conform to the relevant provisions of Subsection 800 of the Standard Specifications and the following:

The work shall consist of the furnishing and installation of 3-inch non-metallic conduit for traffic signal and lighting systems in accordance with the plans and as directed by the Engineer. The conduit material shall be Schedule 80 polyvinyl chloride (PVC) plastic conduit. The conduit quantity may be increased or decreased by the Engineer depending upon actual conditions encountered as provided for in Section 4.06 of the Standard Specifications.

CONDUIT IN GRASS OR IN PLANTED AREAS

Where new conduits are installed in grass and planted areas, no separate payment shall be made for the excavation, sand bedding, backfill, including necessary compaction, or incidental materials, but all costs in connection therewith shall be included in the contract unit price for Item 804.3.

CONDUIT UNDER SIDEWALK OR MEDIAN DRIVEWAYS

Where conduit is installed in sidewalk or paved median or asphalt driveway areas, no separate payment shall be made for the excavation, sand bedding, backfill, including necessary compaction, or incidental materials, but all costs in connection therewith shall be included in the contract unit price for Item 804.3. Payment for cement concrete or asphalt pavement shall be paid for under the respective item.

CONDUIT CROSSING ROADWAYS

Trenches in existing hot mix asphalt pavements not subject to full depth reconstruction shall be sawcut to an 18 inch width. The existing pavements shall be sawcut through their full depth and the pavement removed.

After conduit installation, the trench shall be backfilled and controlled density fill (CDF). CDF shall be Type 2E and shall be specified in Section M4.08.0 of the Standard Specifications. The finished grade of the CDF shall be below existing pavement surface as shown on the construction details. Temporary patch or permanent patch will be placed over CDF to match existing surface grade.

METHOD OF MEASUREMENT

Item 804.3 will be measured for payment by the FOOT of conduit installed, complete in place.

BASIS OF PAYMENT

Item 804.3 will be paid for at the Contract unit bid price per FOOT, which price shall include all labor equipment and materials necessary to complete the work specified above, including, but not limited to, conduit, warning tape, spacers, concrete encasement.

Where conduit crosses roadways, no separate payment shall be made for the sawcutting of pavement, excavation, sand bedding, controlled density fill, or incidental materials, but all costs in connection therewith shall be included in the contract unit price for Item 804.3.

Temporary HMA for patching and or permanent HMA for patching will be under their respective pay items (items 472. and 451.

ITEM 810.42**TELECOMMUNICATION MANHOLE****EACH**

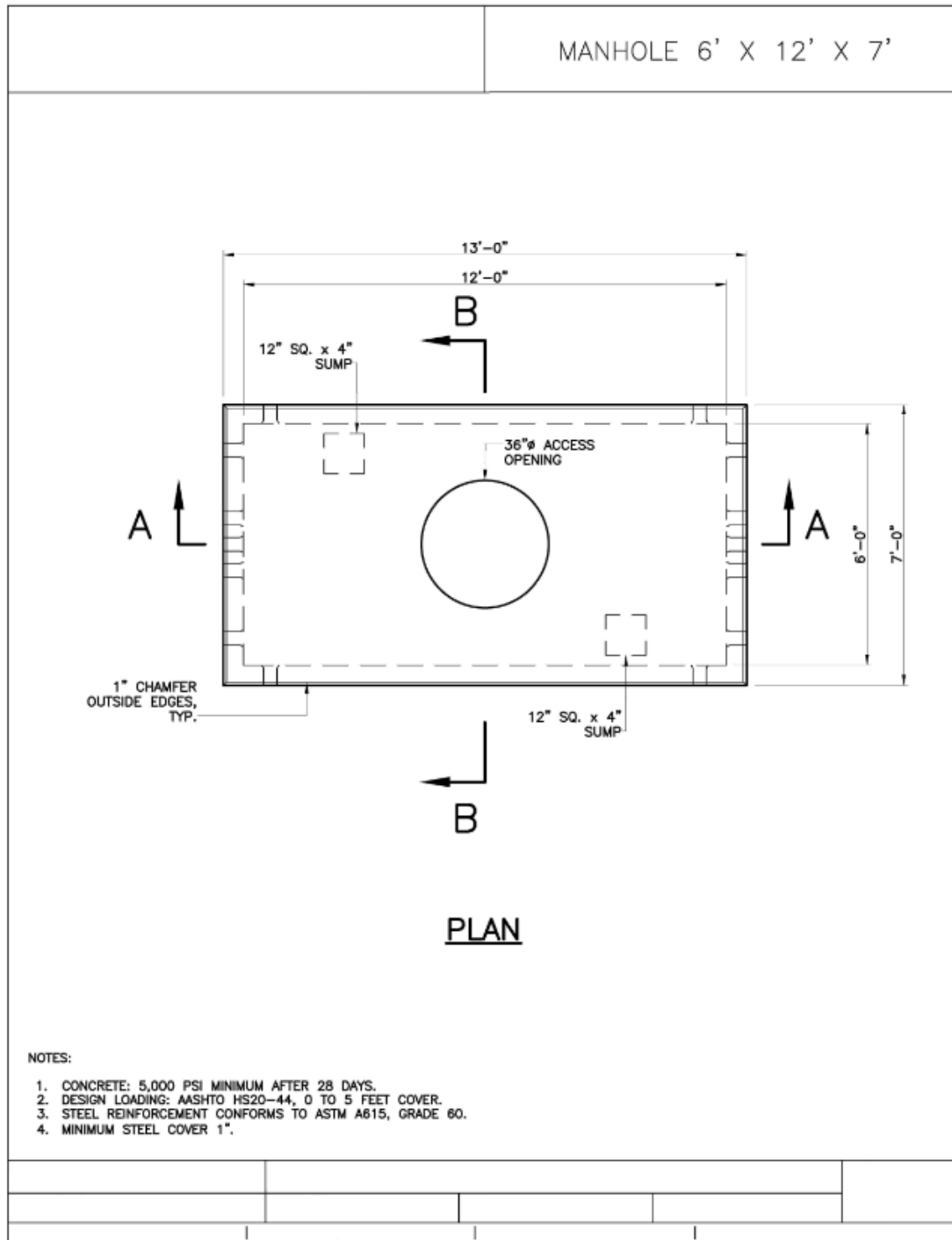
The work under this Item shall conform to the relevant provisions of Subsection 800 of the Standard Specifications and the following:

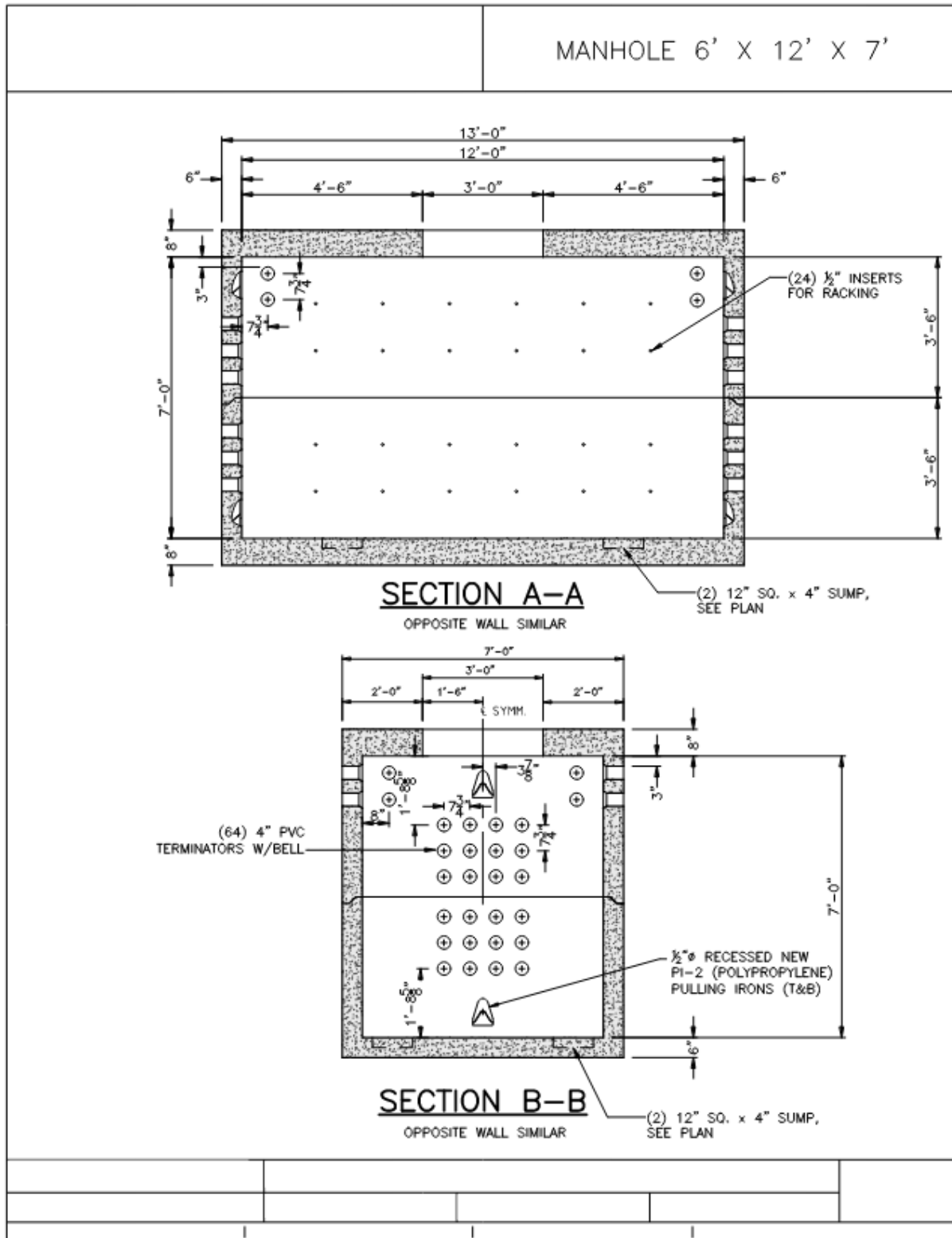
Manholes will be standard telephone precast manholes, equipped with 36" opening, sump, pulling in irons, racking inserts, bonding inserts and cable grounds.

Manholes to be placed level, on firm gravel or stone base, with 24" of cover. Coordinate with the Verizon Master contractor to equip manholes with cable racking, ladder, and frame and cover. Frame and cover should be identified as 'Telephone' and set to final grade.

Verizon contract work inspector should be notified in advance whenever work for Verizon is being done, so that they can inspect the work as required.

All Telecommunication manholes shall meet or exceed the requirements within the standard specification below.

ITEM 810.42 (Continued)

ITEM 810.42 (Continued)

ITEM 810.42 (Continued)**METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Item 810.42 will be measured for payment by the Each precast manhole installed, complete in place.

Item 810.42 will be paid for at the Contract unit bid price per EACH, which price shall include all labor, tools, equipment, materials, mounting hardware, bolt covers, connections, and all incidental costs required to complete the work.

ITEM 811.202**ELECTRIC HANDHOLE****EACH**

The work under this Item shall conform to the relevant provisions of Subsection 800 of the Standard Specifications and the following:

Electric handholes shall be in conformance with the latest edition of the National Electrical Code, Massachusetts Electrical Code, Utility Company Specifications and Local Codes/Guidelines. An Eversource approved polymer concrete electric handhole shall be provided on all proposed underground electric services.

Handholes shall be placed on a 6" layer of ¾" crushed stone in conformance with Section M2.01.4 of the Standard Specifications.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 811.202 will be measured for payment by the Each electrical manhole installed, complete in place.

Item 811.202 will be paid for at the Contract unit bid price per EACH, which price shall include all labor, tools, equipment, materials, mounting hardware, bolt covers, connections, and all incidental costs required to complete the work.

ITEM 815.1**TRAFFIC CONTROL SIGNAL**
LOCATION NO. 1**LUMP SUM****ITEM 816.02****TRAFFIC SIGNAL RECONSTRUCTION**
LOCATION NO. 2**LUMP SUM**

The work to be done under this item shall consists of furnishing and installing Traffic Signal Control Devices in accordance with the applicable portions of Section 800 of the Standard Specifications, the 11th edition of the Manual on Uniform Traffic Control Devices (MUTCD), and the MassDOT amendments to the MUTCD, as amended and supplemented by the following:

The work shall include the furnishing and installation of all or part of the following work: traffic signal controller and cabinet mounted on a foundation; signal posts and foundations; mast arm assemblies with anchor bolts and foundations; emergency vehicle preemption components, vehicle signal heads; backplates; video detection; pedestrian signal heads and APS push button assemblies; all cable and wiring; ground rods, equipment grounding and bonding; pull boxes; power service connections; ethernet and wireless/cellular communication service connections; and all other equipment, materials and incidental costs necessary to provide a complete, fully operational traffic control signal system as specific herein and as shown on the plans.

The locations included in this contract are the following:

- Location No. 1: Intersection of Marion Road (Route 6) and Swifts Beach Road
 - Proposed Traffic Signal
- Location No. 2: Intersection of Marion Road (Route 6) and Wareham Plaza Driveway
 - Reconstruction of Existing Traffic Signal

A list of the major components of the traffic signal system is included on the plans.

Traffic signal operation and signalized intersection approaches shall be in conformance with the MUTCD throughout construction except when the intersections are under police control. The contractor shall submit any proposed interim traffic lane and traffic signal arrangements at intersections that deviate from the existing or proposed arrangements to the Engineer for approval.

EXISTING INSTALLATIONS

Existing signal installations shall be maintained in operation throughout the construction period and until the new signal is ready for operation. The Contractor may use temporary supports for signal heads as necessary to allow construction activities.

Any temporary installations shall be in conformance with the MUTCD. If an existing signal is to be turned off temporarily to allow controller switch overs or rewiring, police detail(s) shall be used to control traffic at the intersection.

Removal of the existing concrete foundations and handholes that are part of the traffic signal system, placing and compacting backfill, and temporary surface restoration where the foundations are removed are included under this item. Also included is disposal of signal system equipment deemed unacceptable for stacking by MassDOT.

ITEMS 815.1 and 816.02 (Continued)

After construction is completed and the new signal is in operation, unused items of the old signal shall be completely removed and transported as directed by the Engineer in accordance with Subsection 815.65. Old cable and unusable materials shall be disposed of by the Contractor.

ALL NEW MATERIALS – PAINT REQUIREMENT

The Contractor shall deliver to the Engineer a certificate of compliance from the manufacturer for all materials purchased from the manufacturer/distributor. All materials shall be new, and certain components, such as the controller and cabinet, shall be purchased from the same manufacturer/distributor and assembled by a qualified electrician/technician to ensure compatibility of components. All signal equipment shall be painted in accordance with standard MassDOT requirements.

SHOP DRAWINGS

Within 30 days following execution of the contract, the Contractor shall submit shop drawings for signal equipment, a list of equipment, and manufacturer's equipment specifications to the Engineer in accordance with the relevant provisions of Subsection 815.20.

The Contractor shall not begin work until approval of the shop drawings and manufacturer's data has been received in writing from the Engineer. Approval of these drawings will be general in character and shall not relieve the Contractor from the responsibility of, or the necessity of, furnishing materials and workmanship conforming to the plans, standard specifications, and these special provisions.

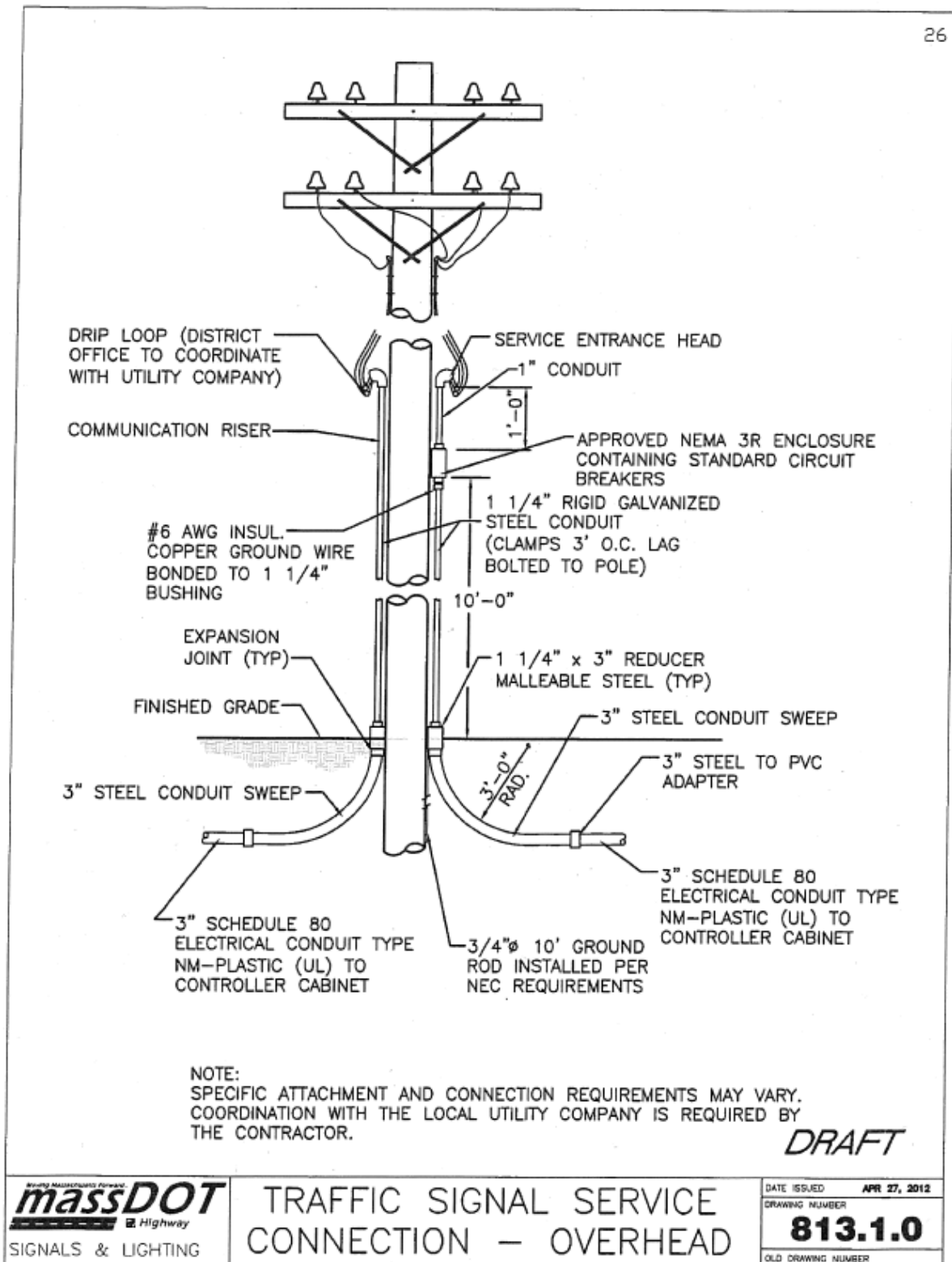
SERVICE CONNECTIONS

New electric service connections for all locations are required for this project. Service connections shown on the plans are approximate only. The Contractor shall determine exact locations from the servicing utility, arrange to complete the service connections, and be responsible for all charges incidental thereto including installation of transformers, if required. Underground power conductors shall be in a separate conduit from other services but located within the same trench is acceptable. The servicing utility will furnish connection and power at the locations shown on the Contract Drawings. The utility company will connect and disconnect power as required. The contractor shall be responsible for discontinuing existing service connections, if applicable.

No work shall be done in manholes or on power poles without a representative of the servicing utility being present. The Contractor will be responsible for coordinating the utility work. It shall also be the Contractor's responsibility to pay all charges to the utility company for performing this work. No direct reimbursement will be made under this contract to the Contractor for payments made to the utility company, it being understood that full compensation for any payment made by the Contractor to the utility company will be included in the contract prices bid. The pole riser for overhead service connections will be incidental to this item. The contractor shall follow the detail shown for "Traffic Signal Service Connection – Overhead."

Please note that the service connection shall be done with Eversource approved handhole (polymer conc.)

ITEMS 815.1 and 816.02 (Continued)



ITEMS 815.1 and 816.02 (Continued)**FLASHING OPERATION**

Changes from automatic flashing to stop-and-go operation and from stop-and-go to automatic flashing operation shall occur as set forth in Section 4G of the latest MUTCD.

SIGNAL CABLE & WIRING

All signal cable connections in the bases of signal poles, posts, and cabinet shall be made by means of appropriate terminal blocks. These blocks shall be completely furnished and installed on terminal block mounting strips in bases. All cables & wires shall comply with Subsection 813.

TRAFFIC SIGNAL EQUIPMENT; TERMINAL & FACILITIES

The traffic signal controller units (CU), malfunction management units (MMU), detector amplifiers, cabinet power supply, bus interface units (BIUs) and all other ancillary traffic signal control components included in the traffic control cabinet shall comply with the National Electrical Manufacturers Association (NEMA) Standard No. TS2-2016, Traffic Controller Assemblies with NTCIP Requirements.

CONTROLLER UNIT AND CABINET

The traffic controller unit supplied shall conform to Section 3 "Controller Units" of the NEMA TS 2 Standard. The traffic controller shall be supplied in a TS 2 - Type 1 ATC configuration as required in the list of major traffic signal items included on the plans. Specifically, the controller units (CU) shall be supplied as an actuated controller with NTCIP capabilities; defined as Type A1N in Subsection 3.2 "Physical Standards" of the NEMA TS 2 Standard.

All the traffic controllers shall communicate using the National Transportation Communications for ITS Protocol (NTCIP), based on Internet Protocol, ISO/OSI and ASN-1. The controller shall use the protocol to communicate with another controller, a field master, or with a remote computer. An Ethernet switch shall be supplied with each controller assembly.

The controllers shall have ATC functionality and shall log system computations ensuring coordination. Controller unit shall be capable of operating as a volume density controller and shall be capable of functioning in every respect as an integrated part of a closed loop traffic control system with internal communication capability and direct access to the data memory.

Controller unit shall have internal Time Base Coordination (TBC) logic.

Controller unit shall use a standard RS232 port provided in or with the local controller to allow for local printing of reports.

Controller unit shall have internal preemption with the capability of size unique preemption sequences. Each preempt sequence shall be fully user programmable for timing and signal display in response to an individual preempt command input.

ITEMS 815.1 and 816.02 (Continued)

Controller unit shall be provided with all necessary hardware, including cables and internal system modem to operate a closed loop system.

Controller Cabinets shall conform to the NEMA TS 2 Standards, Section 7. The TS 2 - Type 1 cabinet shall, at a minimum, meet the requirements of configuration 3 as defined in Table 5-2, "Type 1 Configurations" of the NEMA TS 2 Standard and additional terminals & facilities shall be added, or expanded, as necessary, to operate the number of detector channels and other ancillary equipment shown on the Contract drawings.

The cabinet size shall be a ATC NEMA Size 6 - 56" H x 44" W x 28" D, at a minimum. The cabinet shall include a police door, fan, thermostat, and pullout laptop shelf. In addition, the cabinet shall be sized to include a master controller (for future use), as shown on the Contract documents.

Cabinets shall be made of aluminum and outside painted Aluminum. The cabinets shall also be wired with a normally closed switch connected to a user defined input to the controller for remote monitoring of the control cabinets' door open status. Where applicable, the cabinets shall be installed with the door opening positioned in order to allow general observation of the flow of traffic and the inside of the cabinets at the same time. Controller cabinet foundations shall not obstruct a sidewalk or crosswalk so that passage by physically-challenged persons is impaired. The foundation, if installed in a grassed area, shall include a cement concrete workman's pad and walkway made the same width as the cabinet foundation, extending to a length of 30"-36" away from the foundation, and is a thickness of 4" placed on an 8" compacted gravel base.

The cabinet shall be installed with the door of the cabinet positioned on the side opposite the sidewalk, whenever feasible or as shown on the plan sheets, such that a signal technician standing in front of the open door will see the signalized intersection and not obstruct the sidewalk. The Contractor shall include a 25' RS-232 cable in each cabinet to support communications between the controller unit and a laptop computer.

CABINET POWER SUPPLY

A separate power supply shall be supplied and installed in each of the Traffic signal cabinets. As a minimum, the power supply shall meet all requirements of Paragraph 5.3.5 of the NEMA TS 2 Standard. The unit shall be AC line powered and provide regulated DC power, unregulated AC power, and a line frequency reference for the rack mounted loop amplifiers, bus interface units, load switches and other auxiliary cabinet equipment, as required. The power supply shall be either shelf mounted or installed as part of the detector rack assembly.

TESTING OF GROUND SYSTEM

The Contractor shall perform testing of the equipment grounding system in the presence of the Engineer in accordance with the Standard Specifications.

ITEMS 815.1 and 816.02 (Continued)**BUS INTERFACE UNITS**

The Bus Interface Unit (BIU) shall comply with Section 8 of the NEMA TS 2 Standard. The BIU shall be fully interchangeable with any other manufacturer's unit and interchangeable in a NEMA TS 2 Type 1 cabinet assembly.

The BIU shall perform the interface function between Port 1 at the controller unit, the malfunction management unit, loop detector rack assembly, and the backpanel terminal and facilities.

As a minimum, two LED indicators shall be provided on the BIU front panel. One indicator shall serve a dual use; as a power on indication and as a diagnostic indicator for proper operation of the device. The second indicator shall serve as a transmit indicator illuminating each time data is transmitted.

The contractor shall supply an additional 3 BIUs in each controller cabinet to the District office.

MALFUNCTION MANAGEMENT UNIT (MMU)

The malfunction management unit (MMU) shall comply with Section 4 of the NEMA TS 2 Standard and amendment #4-2012. The MMU shall be capable of operating as a Type 16 with 16 channels (8 vehicle, 4 pedestrian, 4 overlap) and capable of MMU2 programming for Flashing Yellow Arrow Configurations. The MMU's in either the Type 16 or Type 12 configuration shall be capable of operating in a NEMA TS 2 Type 1 cabinet or a NEMA TS 1 cabinet without loss of functionality.

VIDEO DETECTION SYSTEM

The Contractor shall provide a Video Detection System to detect vehicles and bicyclists. The system shall also provide full motion video output showing zones highlighted during detection for fine-tuning. All hardware and software within the traffic signal cabinet shall be NEMA TS-2 compliant.

At the location shown on the plans, the Contractor shall supply and install a Video Detection System. The Video Detection System shall utilize a 360-degree camera with the ability to view and detect vehicles and bicycles on every approach within the detection zones shown on the plans, as well as cameras with radar sensors. The major components of the Video Detection System are further described as follows:

- A. Prior to installation of the Video Detection System a detailed site survey shall be conducted by a factory trained and certified representative. The site survey shall ensure the design of the camera, camera location, camera optics, and video/data interconnect is appropriate for the application.
- B. The supplier of the Video Detection System shall supervise the installation and testing of the Video Detection System and computer software. A factory certified representative from the supplier shall be on site during installation.

ITEMS 815.1 and 816.02 (Continued)

- C. The Video Detection System shall provide one National Television Standards Committee (NTSC) color composite video output.
- D. The Video Detection System shall provide a minimum of 20 detection zones. The system shall provide flexible, user configurable detection zone placement at any orientation within the field of view of the Video Detection System Camera. It shall be possible to overlap detection zones. It shall be possible to configure the Video Detection System to provide detection signals to the traffic signal controller which are comprised of Boolean combinations of detection zones.
- E. The Video Detection System shall provide failsafe operation whereby it places continuous vehicle calls to the traffic signal controller on all detection zones in the event it senses unacceptable video from the Video Detection System Camera.
- F. The Video Detection System shall include a configuring device and/or a Windows based computer software that provides for configuring the Video Detection System, viewing real time video, and updating the flash memory of the Video Detection System with updated application software.
- G. The Video Detection System shall provide count and presence detection performance with at least 96% accuracy under normal (day and night) conditions.
- H. The Video Detection System shall utilize FLASH memory to store the resident application software.
- I. The Video Detection System shall be comprised of a Video Detection System Camera, Video Detection System Cable, and Video Detection System Hardware.
- J. Video Detection System Cameras:
 - 1) The Video Detection System Camera shall operate without degradation over a temperature range of -34 to 60 degrees Celsius at a relative humidity 10% to 90% condensing.
 - 2) The Video Detection System Cameras shall be housed in a water resistant, dust proof NEMA-4 housing. The housing shall include a rear connector for connection of the Video Detection System Cable. The housing shall be field rotatable to allow for proper alignment between the camera and the traveled road surface.
 - 3) The Video Detection System Cameras shall have a heater to prevent the formation of ice and condensation in cold weather and allow the camera to operate correctly while exposed to precipitation and direct sunlight.
 - 4) The Video Detection System Cameras shall have a sunshield to protect the lens from direct sunlight and direct precipitation exposure.
 - 5) The Video Detection System Cameras shall provide useable video and resolvable features in the video image when those features have luminance levels as low as 0.1 lux at night, and as high as 10,000 lux during the day. The Video Detection System Camera shall contain an automatic gain control (AGC) to provide a satisfactory image over the full range of light levels.

ITEMS 815.1 and 816.02 (Continued)**K. Video Detection System Cable**

- 1) The Video Detection System Cable shall interconnect the Video Detection System Camera with the Video Detection System Hardware in the traffic signal control cabinet.
- 2) The Video Detection System Cable shall meet the design requirements of the Video Detection System Camera manufacturer, and shall be designed and manufactured specifically for the Video Detection System Camera supplied.
- 3) The Video Detection System Cable shall be capable of withstanding the rigors of outdoor environments, including all combinations of precipitation, heat and colds from -34 to 74 degrees Celsius, and direct exposure to sunlight without exhibiting any signs of deterioration over time.
- 4) The Video Detection System Cable shall be installed with a suitable drip loop to prevent the entrance of water into the housing.

L. Video Detection System Hardware

- The Video Detection System Hardware shall operate without degradation over a temperature range of -34 to 74 degrees Celsius at a relative humidity of 10% to 90% condensing.
- The Video Detection System Hardware shall include interface device(s) which shall be installed in the traffic control cabinet.
- The interface device(s) shall be used to terminate the traffic controller cabinet end of the Video Detection System Cable.
- The interface device(s) shall contain transient suppression devices for all signals transported on the Video Detection System Cable, including but not limited to video, data, and power.
 - The surge protector shall be electrically connected to the cabinet ground rod.
 - Surge protectors should have peak surge current protection of at least 10K amperes with a response time of less than 5 nanoseconds. The protector complies when a lab report from an independent test laboratory stating the product passes this specification is submitted with the shop drawings.
 - Units should be pre-approved or unconditionally warrantied for at least 10 years and certified to comply with the product's published specifications by an independent laboratory.
- The interface device(s) shall contain a switch or shut-off mechanism that shall allow the user to turn off AC service to all components of the Video Detection System.
- The interface device(s) shall contain a connector for interfacing to a configuring device and/or a Windows based computer in the field for the purpose of configuring the Video Detection System, viewing real time video, and for updating the flash memory of the Video Detection System with updated application software.
- The Video Detection System Hardware shall include all necessary cables for interconnection to the traffic signal controller, AC power service, a modem for transport of NTSC video to the traffic operations center, and a configuring device and/or a Windows based computer in the field.

ITEMS 815.1 and 816.02 (Continued)**RADAR SENSOR**

The radar sensor shall operate in the 24 GHz frequency band and shall operate 1 of 7 available enumerated channels that is user selectable.

The radar detection range shall be over 500 feet minimum, +/-5%.

The radar sensor shall be able to track up the 64 independent objects simultaneously.

Object speed detection shall be within a range of 0 to 150 miles per hours +/- 1.0 miles per hour.

The radar sensor shall be able to detect vehicles in 1 to 6 traffic lanes.

The radar sensor shall be housed in a weather-tight sealed enclosure conforming to IP-67 specifications. The housing shall allow the radar to be adjusted to allow proper alignment between the sensor and the traveled road surface.

When mounted outdoors in the enclosure, the radar shall operate in a temperature range from -34 to 74 degrees Celsius and a humidity range from 0% RH to 100% RH.

The radar sensor shall communicate with the sensor data combiner.

LOAD SWITCHES

Load switches shall comply with Subsection 6.2 of the NEMA TS 2 Standard. All load switches shall utilize optically isolated encapsulated modular solid-state relays. Discrete components on circuit boards are not acceptable.

Load switch indicator lights shall be LED-type and wired on the input side of the device.

Note: The controller cabinet assembly shall be initially supplied with a full complement of load switches to accommodate each available position of the back panel.

Flasher

Flashers shall comply with Subsection 6.3 of the NEMA TS 2 Standard and be equipped with two output indicator lights which will show flashing power out to the cabinet assembly.

FLASH TRANSFER RELAYS

Flash transfer relays shall comply with Subsection 6.4 of the NEMA TS 2 Standard. The field electrical loading for flash operation shall be wired through the transfer relays such that the load on the 2-circuit flasher is as balanced as possible within the limitations of the signal phasing.

Note: The controller cabinet assembly shall be initially supplied with a full complement of flash transfer relays to accommodate each available position of the back panel.

ITEMS 815.1 and 816.02 (Continued)**SPARE CABINET COMPONENTS**

The Contractor shall furnish spare components (load switches, flash cubes, etc.) in the cabinet, as normally required by MassDOT, at the time of the final inspection.

EMERGENCY PREEMPTION

The emergency vehicle preemption control system shall consist of a data encoded phase selector(s) to be installed within the traffic control cabinet. This unit will serve to validate, identify, classify, and record the signal from the optical detectors located on support structures at the intersection. Upon receiving a valid signal from the detector, the phase selector shall generate a preempt call to the controller initiating a preemption operation as shown on the plans. The contractor shall ensure that the system is compatible with emitters located on the town emergency vehicles.

The optical detectors shall be single input, single output units used to control one approach. All traffic signal installations shall be supplied with a minimum of two 1-way optical detectors unless otherwise noted in the major items list. The optical receivers shall be installed with single band of color-coded electrical tape wrapped around vertical body of the receiver. The corresponding preemption cable terminated in the cabinet shall also be wrapped with a single band of electrical tape of the same color as the receiver it is connected to. Each color used within the same cabinet shall be unique.

The phase selector shall be a rack-mounted plug-in four channel, dual priority device. The phase selector shall plug into a shelf-mounted single card slot chassis. Programming the phase selector shall be via a PC-based computer utilizing unit specific software. A hard copy of final programming data shall be left in the control cabinet. The Contractor shall supply a complete set of interface cables for phase selector to laptop connection.

ETHERNET SERVICE CONNECTION

The work shall include the furnishing and installation of the following items: cable service, all cable and wiring; and all other equipment, materials, and incidental costs necessary to provide a complete, fully operational, and closed loop system traffic control signal system.

CELLULAR MODEM:

The Cellular Modem shall be installed in the cabinet as shown on the plans and or as directed by the Engineer to gain remote access via cellular data link. The Contractor shall supply all necessary documentation, wiring and antenna to make for a fully functioning Cellular connection. The Contractor shall work with the agencies IT department to develop an IP address scheme to be used.

The Cellular modem shall have 5 or more 10/100 auto-sensing Ethernet ports. The Cellular modem shall have one or more RS232 Serial DB9 port capable of supporting baud rates up to 115200 bps. The Cellular modem shall have one or more USB 2.0 ports. The Cellular modem shall have a power input of 8-30 VDC (12VDC nominal).

ITEMS 815.1 and 816.02 (Continued)

The supplier shall provide a limited one-year warranty on the Cellular Modem. See suppliers standard warranty included in the Terms and Conditions of Sale documentation. During the warranty period, technical support shall be available from the supplier via telephone within 4 hours of the time a call is made by a user, and this support shall be available from factory-certified personnel or factory-certified installers.

TRAFFIC SIGNAL POSTS AND BASES

Traffic signal posts and bases shall be MassDOT standard octagonal bases (steel). Bases shall be provided with a door opening complete with a cap screw fastening device and a tapped hole for a brass grounding lug.

MAST ARM POLES AND FOUNDATIONS

Mast arm poles, bases and foundations shall be fabricated and constructed in compliance with MassDOT's Standard Drawings, the Contract drawings, the 2013 AASHTO Standard Specification for Structural Supports for Highway Signs, Luminaires and Traffic Signals 6th Edition, and MassDOT's December 2015 Overhead Signal Structure & Foundation Standard Drawings using a design wind speed of 130 MPH.

All mast arm poles shall be Type 2 galvanized steel monolevers. Acceptance of Type 2 mast arm poles will be contingent upon review and approval of shop drawings submitted by the Contractor. The Contractor is not required to submit load calculations for mast arm designs that conform to the 2015 MassDOT Standard Drawings. Shop drawings should be limited to identifying the dimensions of each mast arm and foundation.

Soil boring logs with soil type recommendations are furnished in the plans. These soil type recommendations were used to select the standard foundation designs specified in the Contract drawings. In the event that the Contractor encounters soil conditions or ledge which prevent the use of the specified MassDOT standard foundation type, the Contractor is responsible for notifying the Design Engineer, who will select and design an alternative foundation type that conforms with AASHTO Standards. Alternative foundation types could include spread footings, coring and socketing into rock or other foundations previously used to support similar loads, within reason.

The Contractor shall provide a set of calculations, stamped by a Structural Engineer registered in the Commonwealth of Massachusetts, along with plans and specifications for the foundations for review and acceptance by the Design Engineer. The Contractor shall request written approval from the Engineer before the placement of any concrete for foundations of mast arms, signal posts, and cabinets.

The Contractor will be responsible for supplying the Design Engineer with final as built dimensions/elevations to be updated on the plans.

ITEMS 815.1 and 816.02 (Continued)

Anchor bolts shall be set accurately, and tops shall be formed neatly. The top forming shall extend downward for a minimum of 12 inch on the side of any foundation. The lower portions of all foundations may be poured directly against undisturbed earth or may be formed at the option of the Engineer. Foundations shall not obstruct a sidewalk or crosswalk so as to impair passage by physically challenged persons and shall be flush; ADA/AAB clearance shall be maintained.

PULL BOXES AND HANDHOLES

Pull box units shall be precast concrete and conform to MDPW(MassDOT) SD2-031. The 1.5-inch sleeve through the curb joint shall be included as a part of this item. All or any excavation related to this item shall also be included. Electric handholes shall conform to MDPW(MassDOT) SD2-024 or equivalent including the cast iron frame and cover.

Handholes placed in the roadway and driveways shall be able to accommodate H20 loading. $\frac{3}{4}$ Inch crushed stone (M2.01.4) shall be placed at the bottom of the pull box or handhole to facilitate drainage. Duct seal shall be placed on all conduit ends.

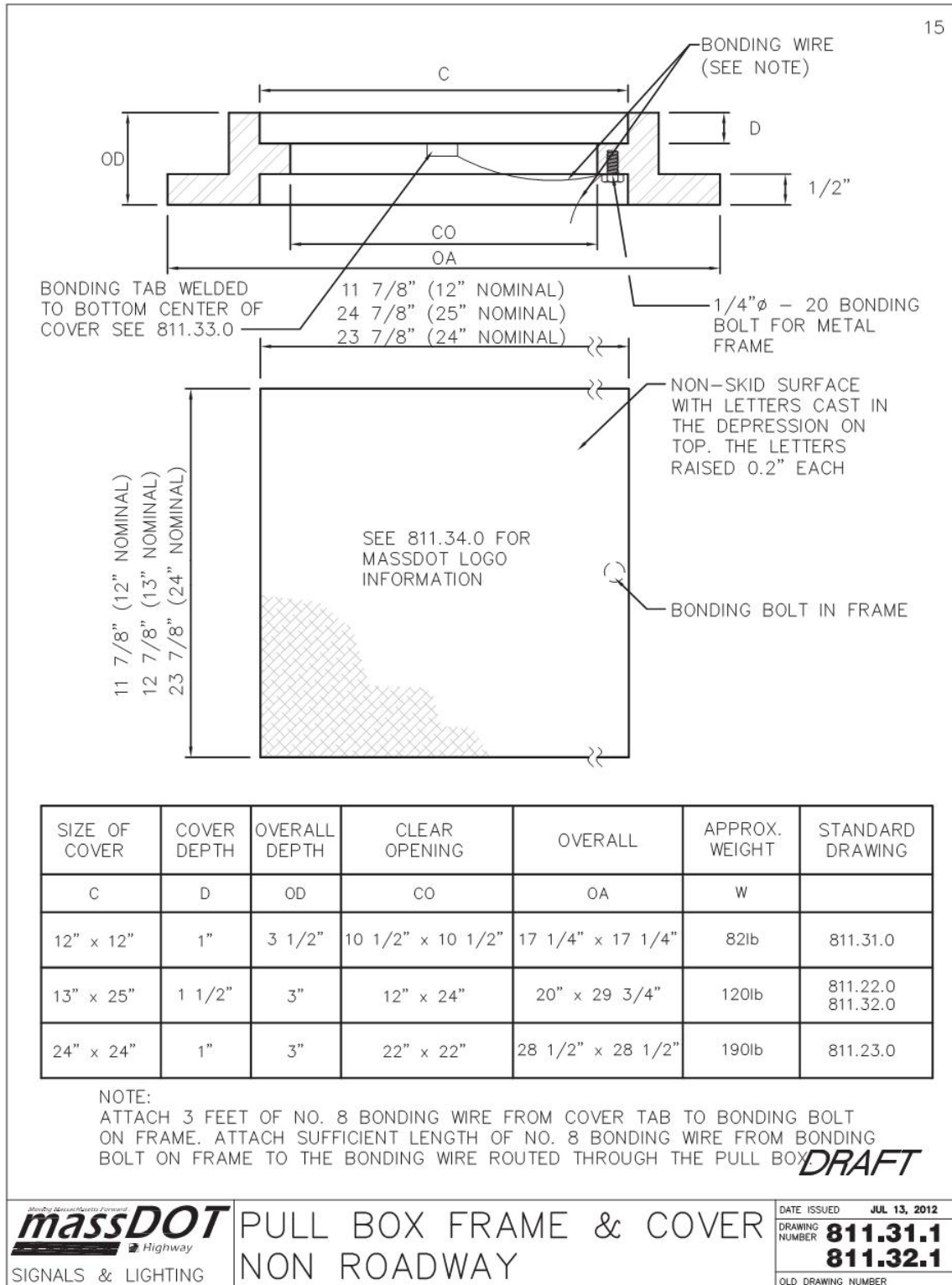
Pull boxes that have more than four conduit connections shall conform to MassDOT SD2-030 which is 8" x 23" size.

Pull boxes shall be grounded according to the following details:

811.31.1/811.32.1

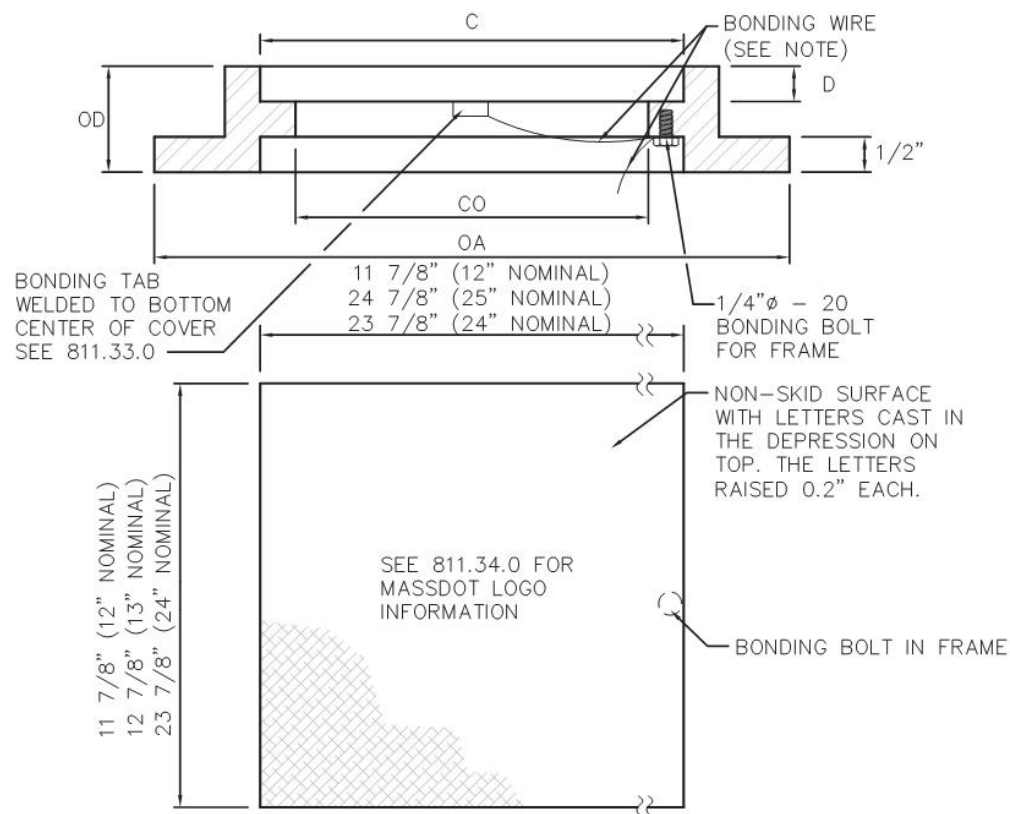
811.31.2/811.32.2

811.33.0

ITEMS 815.1 and 816.02 (Continued)

ITEMS 815.1 and 816.02 (Continued)

16



NOTE:

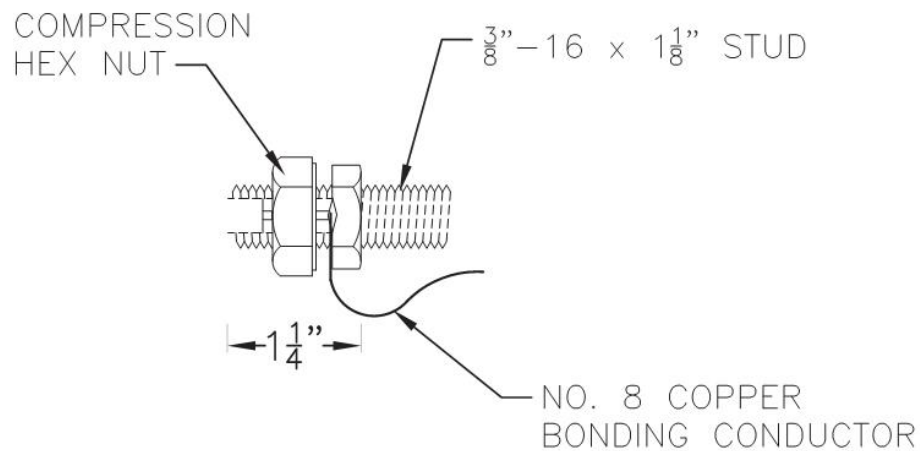
1. ATTACH 3 FEET OF NO. 8 BONDING WIRE FROM COVER TAB TO BONDING BOLT ON FRAME. ATTACH SUFFICIENT LENGTH OF NO. 8 BONDING WIRE FROM BONDING BOLT ON FRAME TO THE BONDING WIRE ROUTED THROUGH THE PULL BOX.
2. WHEN INSTALLED IN ROADWAY, COVER SHALL BE BOLTED DOWN PER MANUFACTURERS REQUIREMENTS.

SIZE OF COVER	COVER DEPTH	OVERALL DEPTH	CLEAR OPENING	OVERALL	APPROX. WEIGHT	STANDARD DRAWING
C	D	OD	CO	OA	W	
12" x 12"	1"	3 1/2"	10 1/2" x 10 1/2"	17 1/4" x 17 1/4"	89lb	811.31.0
13" x 25"	1 1/2"	3"	12" x 24"	20" x 29 3/4"	159lb	811.22.0 811.32.0
24" x 24"	1"	3"	22" x 22"	28 1/2" x 28 1/2"	463lb	811.23.0

DRAFT

ITEMS 815.1 and 816.02 (Continued)

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NOTES:

1. BONDING POST CONNECTOR SHALL BE LONG STUD TYPE WHICH WILL ACCOMMODATE A DOUBLE CONDUCTOR INSTALLATION.
2. ATTACH 3 FOOT LENGTH OF NO. 8 COPPER BONDING CONDUCTOR FROM BONDING POST CONNECTOR INSTALLED ON COVER TO BONDING POST CONNECTOR INSTALLED ON FRAME.
3. ATTACH FREE END OF BONDING CONDUCTOR ROUTED THROUGH CONDUIT SYSTEM TO BONDING POST CONNECTOR INSTALLED ON THE FRAME.
4. LUG SHALL BE EITHER COPPER OR BRASS.

DRAFT

ITEMS 815.1 and 816.02 (Continued)**VEHICULAR SIGNAL HEADS**

The housings shall be 12-inch LED Type and shall be listed on the MassDOT "Approved Equipment" list. 5-inch louvered black backplates with 3" retroreflective yellow border shall be provided on all signal heads or as noted on the plans. All indications shall be equipped with a standard cut-away visor. Only backplates that are listed in the latest MassDOT "Approved Equipment List" will be used on this project.

Signals shall be mounted using rigid clamp kit hardware. All signal heads mounted overhead on mast arms shall be installed, with the bottom of the signals at the same height. The Contractor shall modify any signal head location that is visibly obstructed to a motorist or pedestrian by overhead street light posts or other obstructions as determined by the Engineer.

BICYCLE SIGNAL HEADS

The housings shall be 8-inch LED Type. All bicycle signal indications shall have the bicycle symbol as shown on the plans (Location No. 1). All indications shall be equipped with a standard cut-away visor.

SOFTWARE

All local controller, malfunction management unit, preemption unit and detector amplifier software shall be supplied with the latest available revision. Any software upgrades released by the manufacturer shall be supplied at no charge to the owner for a period of five years after acceptance of the traffic signal installations.

DATABASE PROGRAMMING

Each programmable local hardware component (controller, malfunction management unit, preemption unit, and detector amplifier) shall be initially programmed by the Contractor based on information contained on the plans.

WARRANTY – LED SIGNALS

The LED signal module will be replaced or repaired by the manufacturer if it exhibits a failure due to workmanship or material defects within the first 60 months of field operation.

The LED signal module will be replaced or repaired by the manufacturer if it exhibits either a greater than 40 percent light output degradation or a fall below the minimum intensity levels within the first 36 months of field operation.

ITEMS 815.1 and 816.02 (Continued)**PEDESTRIAN SIGNAL HEADS WITH COUNTDOWN DISPLAY**

The housings shall be 16" LED Type with countdown display. All pedestrian signal indications shall have full overlay international symbol (Hand/Person) graphics (not outlined) as shown on the plans. All indications used at an intersection shall be a similar style. The pedestrian signal head shall be a 16"x18" single bimodal section with Count Down Timer. The placement of pedestrian signals shall conform to the Section 4I of the 11th edition of the MUTCD.

ACCESSIBLE PEDESTRIAN SIGNALS (APS) – PEDESTRIAN PUSH BUTTONS

APS pedestrian push button controls shall be raised from or flush with their housings and shall be a minimum of 2 inches in the smallest dimension. The force required to activate the controls shall be no greater than 5lbs.

APS push buttons shall include an audible locator tone, vibro-tactile arrow integrated sign and saddle with LED confirmation light.

APS pedestrian push buttons shall be located as close as practicable to the level landing of the sidewalk curb ramp serving the controlled crossing and shall permit operation from a clear ground space. If two crosswalks, oriented in different directions, end at or near the same location, the positioning of pedestrian push buttons and/or legends on the pedestrian push button signs should clearly indicate which crosswalk signal is actuated by each pedestrian push button. The placement of pedestrian signal push buttons or detectors shall conform to the Section 4I-05 of the 11th edition of the MUTCD and/or as shown on the plan sheets. The 9"x 15" standard sign (R10-3e) shall be integral to the pushbutton assembly or mounted immediately above the button.

A maximum mounting height of 42 inch above the finish sidewalk grade shall be used for pedestrian push buttons. Buttons shall be located within 10 inches of the back of sidewalk, depending on the mounting height and available level sidewalk area, to conform to the ADA side reach requirements for Accessibility.

TRAFFIC SIGNAL LED MODULE

All signal and pedestrian displays shall be equipped with LED signal modules. All red, amber, green, and pedestrian signal housings with the exception of optically programmed and fiber optic housings and shall conform to the following where applicable:

- ITE's Vehicle Traffic Control Signal Heads – Light Emitting Diode (LED) Arrow Traffic Signal Supplement, Dated July 1, 2007
- ITE's Vehicle Traffic Control Signal Heads – Light Emitting Diode (LED) Circular Signal Supplement, Dated June 27, 2005.
- ITE's Pedestrian and Countdown Signal Modules Compliant to PTCSI – Part 2 Light Emitting Diode (LED), Dated, February 2011
- On the MassDOT Traffic Signal Approved Equipment List

ITEMS 815.1 and 816.02 (Continued)

For an LED module to be installed on this project, the LED module shall have approval from the MassDOT Traffic Control Products Approved Equipment Committee and be included on the Traffic Control Products List prior to the date of this proposal.

To prevent the LED module warranty from being voided, the connecting leads on the module shall not be cut. The original LED module leads shall be connected to the signal head terminal block as continuous wire without splices.

The LED signal module will be replaced or repaired by the manufacturer if it exhibits one of the following:

- A failure due to workmanship or material defects within the first 60 months of field operation.
- A greater than 40 percent light output degradation or a fall below the minimum intensity levels (as defined by the latest ITE performance specifications) within the first 36 months of field operation.

SPEECH WALK MESSAGE

The speech walk message shall be audible from the beginning of the associated crosswalk. The speech walk message and associated APS pushbuttons shall be as follows:

PEDESTRIAN PUSHBUTTON	SPEECH WALK MESSAGE
Item 815.1	
P1, P2, P3, P4	Walk sign is on to cross Marion Road
P5, P6	Walk sign is on to cross Swifts Beach Road
Item 816.02	
P1, P2, P5, P6	Walk sign is on to cross Marion Road
P3, P4	Walk sign is on to cross Plaza Driveway

Tactile Arrows and Locator Tones - Shall meet the following minimum requirements:

- APS pushbuttons shall incorporate a locator tone at the pushbutton. The locator tone, measured at 3 feet from the APS pushbutton, shall be 2dB minimum and 5dB maximum above ambient noise level in standard operation and shall be responsive to ambient noise level changes. Tones shall consist of multiple frequencies with a dominant component of 880Hz. The duration of the locator tone shall be 0.15s and shall repeat at intervals of 0.15s.
- APS pushbuttons shall be a minimum of 2 inches across in diameter and shall contract visually with their housing and mounting.
- APS pushbuttons shall include a vibro-tactile arrow aligned parallel to the crosswalk direction. The arrow shall be raised 0.03 inches minimum and shall be 1.5 inches minimum in length. The arrow head shall be open at 45 degrees to the shaft and shall be 33 percent of the length of the shaft. Stroke width shall be 10 percent minimum and 15 percent maximum of arrow length. The arrow shall contrast with the background.
- The arrow shall vibrate during the "WALK" portion of the cycle.

ITEMS 815.1 and 816.02 (Continued)**TESTING OF TRAFFIC SIGNAL SYSTEM**

The signal system shall operate continuously without failure for 30 days before requesting a final inspection. The Contractor shall notify the Resident Engineer when the signal is first put into service.

The Contractor shall perform testing of the equipment grounding, terminals & facilities, detectors, preemption, interconnect, and other systems in the presence of the MassDOT Department and Engineer in accordance with the Standard Specifications. The Contractor shall order and pay for a Police Office detail to facilitate the equipment testing.

AS-BUILT DRAWINGS

The Contractor shall supply the engineer with marked-up plans or hand sketches to indicate equipment that has been installed in a location that differs from the contract drawings. Conduit shall be drawn with ties to enable future dig-safe requests.

CONSTRUCTION METHODS

Once the Contractor begins construction in the area, it shall then be his responsibility to operate and maintain the traffic/pedestrian signal system. Traffic signal operation and signalized intersection approaches shall be in conformance with the MUTCD throughout construction except when the intersections are under police control. The contractor shall submit any proposed interim traffic lane and traffic signal arrangements at intersections that deviate from the existing or proposed arrangements to the Resident Engineer for approval.

The Contractor shall be required to keep records of dates when traffic signal posts are installed and when traffic signals are put on flashing and stop and go. These records are to be submitted to the Engineer by the first of each month. If required, the Contractor shall make all electrical arrangements with utility for providing power and other service to the controllers.

The Contractor shall supply and install the conduit and wires to the utility company under their supervision. The Contractor will be required to pay directly to the company, all charges resulting from, at no additional cost to MassDOT above the lump sum bid for this contract. The contractor, or his agent, will not cause any of his personnel to work in an electric manhole or on a pole without permission of the responsible utility company.

REMOVAL AND TRANSPORTING OF THE EXISTING TRAFFIC SIGNAL EQUIPMENT

Existing traffic signal equipment in good condition shall be delivered to and stacked at the MassDOT facility as instructed by the Engineer.

ITEMS 815.1 and 816.02 (Continued)**BASIS OF PAYMENT**

The work under Items 815.1 and 816.02 will be paid for at their respective Contract lump sum price, which price shall include all labor, material, equipment, submittals and incidental costs required to complete work and provide a fully operating interconnected traffic control signal system.

No separate payment will be made for maintenance of existing installations, the removal and stacking and transporting of existing traffic signal equipment. All costs in connection therewith shall be included in the lump sum price.

Conduit will be paid separately under Item 804.3, 3-inch Electrical Conduit Type NM-Plastic (UL).

Additionally, pull boxes will be paid separately under Items 811.22 and 811.31.

ITEM 826.70**ELECTRIC SERVICE RISER RELOCATION****EACH**

The work under this item shall conform to the relevant provisions of Subsection 800 of the Standard Specifications and the following:

The work under this item shall consist of the removal and relocation of existing underground secondary electrical services from relocated poles.

New utility poles will be installed "BY OTHERS". The contractor shall supply and install a new rigid galvanized riser pipe and sweep assembly, SCH 80 PVC conduit with sand bedding, handhole (polymer concrete) with $\frac{3}{4}$ " crushed stone (M2.01.4) bedding 6" min. below base of handhole, wiring and appurtenances as necessary per the latest edition of the National Electrical Code, Massachusetts Electrical Code, Utility Company Specifications and Local Codes/Guidelines to complete the service relocation.

The work shall include all excavation, sand bedding, backfill, compaction, and materials or any other requirements in accordance with the latest edition of the National Electrical Code, Massachusetts Electrical Code, Utility Company Specifications and Local Codes/Guidelines.

The work associated with disconnecting power and reconnecting power to the utilities secondary power lines should be performed at a time convenient to the property owners or tenants occupying the building. The actual time of day or evening for the disconnecting and reconnecting will be agreed upon between the Engineer, Power Company, and the property owner/tenant during construction. No additional compensation will be given for this work outside of normal hours if required.

METHOD OF MEASUREMENT

Item 826.70 will be measured for payment by each electric service riser removed and relocated complete in place.

BASIS OF PAYMENT

Item 826.70 will be paid for at the contract unit price per each. This shall be full compensation for the furnishing of all labor, risers, conduit, sand bedding, handholes w/crushed stone bedding, wiring, and miscellaneous materials, tools, and equipment, plus any related Utility charges and/or permit fees associated with the work complete in place.

The work associated with the relocation of the utility poles and the transfer of the respective utility companies overhead primary and secondary wiring shall be the responsibility of the respective utility companies and shall not be paid for under this item.

<u>ITEM 852.11</u>	<u>TEMPORARY PEDESTRIAN BARRICADE</u>	<u>FOOT</u>
<u>ITEM 852.12</u>	<u>TEMPORARY PEDESTRIAN CURB RAMP</u>	<u>EACH</u>

DESCRIPTION

Work under these items consist of furnishing, deploying, maintaining in proper operating conditions, and removing temporary pedestrian barricades and temporary pedestrian ramps as part of a Temporary Pedestrian Access Route (TPAR) in order to guide pedestrians around a fully- or partially-closed sidewalk. These devices are intended to prevent pedestrians from entering the work area and to prevent pedestrians from inadvertently entering the vehicle travel lane by providing visual and physical separation between each space.

MATERIALS

The Temporary Pedestrian Barricade shall have a continuous bottom rail or edge no more than two (2) inches above the ground and eight (8) inches in height (minimum) to accommodate cane users, have a smooth and continuous hand railing along the top edge no less than 32 inches above the ground and not obstruct or project into the pedestrian path of travel. Barricade walls shall be nearly vertical and generally within the same plane.

If exposed to traffic, Temporary Pedestrian Barricades shall be crashworthy.

The Temporary Pedestrian Curb Ramp shall provide a 48 inch minimum width, with a firm, stable, and non-slip surface. Protective edging with a two (2) inch minimum height shall be installed when the curb ramp or landing platform has a vertical drop of six (6) inches or greater.

The Temporary Pedestrian Curb Ramp walkway and landing area surface shall be of a solid, continuous, contrasting color abutting up to the existing sidewalk.

If a Temporary Pedestrian Curb Ramp leads to a crosswalk, a detectable warning pad must be used at the base of the ramp; if it leads to a protected path that does not conflict with vehicular traffic then a detectable pad shall not be used.

CONSTRUCTION METHODS

The Temporary Pedestrian Barricade shall be placed in an area that will provide pedestrians with a TPAR on a smooth, continuous hard surface for its entirety. The geometry and alignment of the facility shall meet the applicable requirements of the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities” and the Massachusetts Architectural Access Board.

The recommended width of the TPAR is 60 inches, but if constraints exist a minimum clear width of 48 inches shall be provided along its entirety. If a 60 inch width cannot be accommodated in full, a 60 inch by 60 inch passing space shall be provided every 200 feet or less along the TPAR. Turning areas shall be 60 inches by 60 inches minimum.

ITEMS 852.11 AND 852.12 (Continued)

Lateral joints between any surfaces shall not exceed 0.5 inches. Lateral edges may be vertical up to 0.25 inches high and shall be beveled at 1V:2H between 0.25 inches and 0.5 inches.

The TPAR shall be kept clear of debris, snow, and ice and the Temporary Pedestrian Barricades and Temporary Pedestrian Curb Ramps shall not obstruct drainage.

Removal and/or resetting of Temporary Pedestrian Barricades and Temporary Pedestrian Curb Ramps shall be considered incidental.

COMPENSATION

Payment for Temporary Pedestrian Barricades will be made at the contract price per foot installed in place, including all incidental items. This price shall include the cost of furnishing, installing, resetting, removal, and maintaining in good working condition.

Payment for Temporary Pedestrian Curb Ramps will be made at the contract price per each unit installed in place, including all incidental items. This price shall include the cost of furnishing, installing, resetting, removal, and maintaining in good working condition.

ITEM 853.8**TEMPORARY ILLUMINATION FOR WORK ZONE****DAY**

The work under this Item shall conform to the relevant provisions of Subsection 850 of the Standard Specification and the following:

The work under this Item shall include the deployment and maintaining in proper operating condition an LED balloon diffuser lighting system. These portable light towers shall be used throughout the project area for temporary work zone lighting. The use of unshielded high wattage flood lights shall not be permitted.

These towers shall be used, relocated and adjusted to meet the criteria in Section 850 of the Standard Specifications and the following:

The Contractor shall illuminate the following work zone areas:

- Change in direction (i.e., work zone entrances and exits, crossovers, etc.)
- Tapered areas
- Actual area where the construction is being performed

Light measurement shall be based on the illuminance method and the lighting levels shall be based on the classification of construction activity that is taking place. At no time shall the light level be below 5 fc and the uniformity shall not exceed 6:1. Task Classifications and recommended illumination levels is shown in Table 1.

ITEM 853.8 (Continued)

Task Classifications	Illumination Level	Average Minimum Maintained Illuminance
All work operations areas, setup of lane or road closures, lane closure tapers, and flagging stations, such as: Excavation (all types), Embankment Fill and Compaction, Reworking Shoulders, Asphalt Pavement Rolling, Subgrade, Stabilization and Construction, Base Course Rolling, Sweeping, Cleaning and Landscaping.	Level I	5 foot-candles
Areas on or around construction equipment; asphalt paving, milling, and concrete placement and/or removal, such as, Milling, Removal of Pavement, Asphalt Paving and Resurfacing, Concrete Pavement, Waterproofing and Sealing, Sidewalk Construction, Base Course Grading and Shaping, Surface Treatment, Bridge Decks, Drainage Structures and Drainage Piping, Other Concrete Structures, Barrier Wall and Traffic Separators, Guardrails and Fencing, Striping and Pavement Markings, Repair of Concrete Pavement, Highway Signs, Hole Filling and Repair of Guardrails and Fencing.	Level II	10 foot-candles
Pavement or structural crack/ pothole filling; joint repair, pavement patching and/or repairs, installation of signal/electrical/mechanical equipment, such as, Traffic Signals, Highway Lighting Systems and Crack Filling	Level III	20 foot-candles

TABLE 1
TASK CLASSIFICATIONS AND ILLUMINATION LEVELS

A detailed work zone lighting plan shall be submitted to MassDOT for approval before any work has commenced. Said plan shall include photometrics that detail the light levels that are to be provided. Photometrics shall include the following: calculated illuminance, uniformity, and glare avoidance verification throughout the work zone as well as the active travel lanes. The lighting plan shall be submitted with all supporting calculations, catalog cut sheets and supporting documentation.

Any potential glare from the lighting system should be considered from each direction and on all approaching roadways and opposing lanes of traffic. Glare from the illumination system should be minimized as much as possible for both workers and motorists in adjacent active travel lanes. If necessary, the Contractor shall provide supplemental hardware, such as, visors, louvers, shields, glare screen and barrier to reduce glare in adjacent active travel lanes.

The plan shall show the layout for each work area including the number, location, spacing of all fixed and/or mobile structures, description of illumination equipment that is proposed to be used on this project, and mounting details for mobile lights attached to construction equipment. Plan shall be designed by a professional engineer that is registered and licensed by the

ITEM 853.8 (Continued)

Commonwealth of Massachusetts and shall be submitted to the Engineer for approval prior to any nighttime work operations within the State Highway Right of Way.

The Contractor shall allow MassDOT up to 30 calendar days for review and comment.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 853.8 will be measured and paid for at the contract unit price per DAY. The cost shall include all labor, materials, equipment, tools and all incidentals required for the design and installation of the work zone lighting system. This shall include, but not be limited to lighting plan preparation, wiring connections, equipment relocations, and include all material and labor incidental for a complete, functional and operational work zone illumination system.

The price of this item shall include the material and labor necessary to install any supplemental hardware required to reduce glare on all adjacent active travel lanes.

The per day price shall be full compensation for all “Temporary Illumination for Work Zone” regardless of the number of concurrent work areas, amount of equipment concurrently in use or the durations of or changes of the work shifts per day.

Installation and modifying the existing set-up shall be incidental to Item 853.8.

ITEM 859.1 **REFLECTORIZED DRUMS WITH SEQUENTIAL** **DAY**
FLASHING WARNING LIGHTS

The work under this Item shall conform the relevant provisions of Subsection 850 of the Standard Specifications and the following:

Work under this item consists of furnishing, installing, maintaining in proper operating conditions, and removing reflectorized drums, and any necessary ballast, equipped with sequential flashing warning lights.

MATERIALS

Reflectorized drums shall be listed on the MassDOT Qualified Traffic Control Equipment List. Reflective sheeting on drums shall meet or exceed ASTM D4956 Type VIII. All drums shall be maintained in a satisfactory manner including the removal of oils, dirt, and debris that may cause reduced retroreflectivity.

The Contractor shall use one of the following sequential flashing warning light systems unless otherwise approved by the Engineer:

1. Empco-Lite LWCS.
2. pi-Lit® Sequential Barricade-Style Lamp; or
3. Unipart Dorman SynchroGUIDE.

Sequential flashing warning lights shall be secured to reflectorized drums per the light manufacturer's specifications.

CONSTRUCTION METHODS

The first ten (10) drums in any merging or shifting taper as designated in the Temporary Traffic Control Plan shall be equipped with sequential flashing warning lights. These lights shall be operating, at a minimum, between dusk and dawn when the taper is deployed.

The successive flashing of the sequential warning lights shall occur from the upstream end of the merging or shifting taper to the downstream end of the taper in order to identify the desired vehicle path. Each warning light in the sequence shall be flashed at a rate of not less than 55, nor more than 75 times per minute.

Warning lights shall be powered off when drums are not deployed in a taper.

METHOD OF MEASUREMENT

A group of ten (10) reflectorized drums with sequential flashing warning lights is considered one (1) unit and will be measured by the day. Each period of up to 24 hours during which this unit is in use will be measured as one day regardless of the number of times that the drums are positioned, repositioned, removed, or returned to service.

BASIS OF PAYMENT

Reflectorized Drums with Sequential Flashing Warning Lights will be paid for at the contract unit price per day, which shall include full compensation for furnishing, positioning, repositioning, and removing the group of ten (10) drums as directed by the Engineer.

<u>ITEM 867.104</u>	<u>4 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC)</u>	<u>FOOT</u>

The work under this Item shall conform to the relevant provisions of Subsection 860 of the Standard Specifications and the following:

This item of work consists of furnishing materials and the application of ReflectORIZED Pavement Markings in accordance with the MUTCD.

MATERIALS

Materials shall meet the requirements specified in M7.01.03: Yellow Thermoplastic ReflectORIZED Pavement Markings.

METHOD OF MEASUREMENT

Item 867.104 will be measured for payment by the foot of 4 inch reflectORIZED yellow line (thermoplastic) applied complete in place.

The lengths of solid lines will be obtained by:

1. Calculation from established base line stations; or
2. Use of a measuring wheel; or
3. Vehicle odometer readings.

BASIS OF PAYMENT

Item 867.104 will be paid for at the contract unit price per foot, which price shall include all material, labor, equipment and all incidental costs required to complete the work.

ITEM 874.2**TRAFFIC SIGN REMOVED AND RESET****EACH**

The work under this Item shall conform to the relevant provisions of Subsections 828 and 840 of the Standard Specifications, the Standard Drawings for Signs and Supports and the following:

The work under this Item shall include the removal and resetting of the existing traffic signs and posts as indicated and/or as directed by the Engineer.

The Contractor shall be responsible for any damage that may occur to the signs while being removed and reset. The Contractor shall replace the sign and/or post at his own expense if they are damaged or lost either directly or indirectly as a result of this operation.

The Contractor will be held responsible for sign panels to be removed and reset and he shall replace or repair any damage due to his operation at his own expense. Any new materials shall be equal and similar to the present signs, including painting and lettering.

The work shall include removing the supports, excavating of the existing foundations to a depth of 12 inches below finish grade in sidewalks and 3 feet below finish grade within the roadway, the disposal of the concrete foundations, the backfilling with compacted gravel of the holes resulting from the excavation and the removal of the supports and the replacement, in kind, of any surface material disturbed.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 874.2 will be measured for payment by the Each traffic sign and posts as one unit removed and reset in its final position, complete in place.

Item 874.2 will be paid at the Contract unit price per Each, which price shall include all labor, materials, equipment and incidental costs required to complete the work, including dismantling, loading, transporting, and stacking of sign panels, the excavation and disposal of existing foundations and supports, supplying and placing of compacted gravel backfill where foundations and posts are removed.

Loam borrow and seeding, installed to restore the disturbed areas shall be paid under Item 751., 751.1, and Item 765. respectively.

Posts that have been damaged through no fault of the Contractor as determined by the Engineer shall be replaced and paid for under Item 847.1.

ITEM 874.21**FLASHING SCHOOL ZONE TRAFFIC SIGN
REMOVED AND RESET****EACH**

The work under this Item shall conform to the relevant provisions of Subsections 824, 828 and 840 of the Standard Specifications, the Standard Drawings for Signs and Supports and the following:

The work under this Item shall include the removal and resetting of existing flashing school zone traffic sign as indicated on the Plans and/or as directed by the Engineer.

The Contractor shall be responsible for any damage that may occur to the sign while being removed and reset. The Contractor shall replace the sign, post, base, and/or flasher at his own expense if they are damaged or lost either directly or indirectly as a result of this operation.

The Contractor will be held responsible for the sign panel, post, base, flasher, wiring, and/or all incidental materials necessary for operating and controlling the flasher to be removed and reset, and he shall replace or repair any damage due to his operation at his own expense. Any new materials shall be equal and similar to the present signs, including painting and lettering.

The work shall include removing the supports, excavating of the existing foundations to a depth of 12 inches below finish grade in sidewalks and 3 feet below finish grade within the roadway, the disposal of the concrete foundations, the backfilling with compacted gravel of the holes resulting from the excavation and the removal of the supports and the replacement, in kind, of any surface material disturbed.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 874.21 will be measured for payment by the Each flashing school zone traffic sign and posts as one unit removed and reset in its final position, complete in place.

Item 874.21 will be paid at the Contract unit price per Each, which price shall include all labor, materials, foundation, equipment and incidental costs required to complete the work, including dismantling, loading, transporting, and stacking of sign panels, post, base, and flashers, the rewiring of the flashers, the excavation and disposal of existing foundations and supports, and the supplying and placing of compacted gravel backfill where foundations and posts are removed.

Loam borrow and seeding, installed to restore the disturbed areas shall be paid under Item 751., 751.1, and Item 765. respectively.

ITEM 874.41**TRAFFIC SIGN REMOVED AND DISCARDED****EACH**

The work under this Item shall conform to the relevant provisions of Subsection 828 of the Standard Specifications and the following.

The work to be done under this Item shall consist of the dismantling, removing, and disposal of all existing street name, and regulatory and warning signs and their supports as noted on the plans and/or as directed by the Engineer.

Also included is the excavation of the existing foundations. If, in the opinion of the Engineer, the existing foundation will not interfere with new construction, it may be removed to a depth of 12 inches below the existing ground in sidewalks and 3 feet below existing ground within the roadway, the hole backfilled with gravel and compacted, and the existing surfaces restored or replaced in kind. The existing sign panels and supports, under this Item, not needed on the project, shall be discarded at the Contractor's cost.

The existing signs shall not be removed until the new signs and structures replacing them are ready for traffic unless otherwise directed by the Engineer.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 874.41 will be measured for payment by the Each traffic sign and posts as one unit removed and discarded.

Item 874.41 will be paid at the Contract unit price per Each, which price shall include all labor, materials, equipment, dismantling, removing and discarding of the signs and their supports, excavation and disposal of the existing foundation, supplying and placing of gravel backfill and compaction, and the restoration or replacement in kind of disturbed surfaces and incidental costs required to complete the work. Loam Borrow and Seeding installed to restore the disturbed area(s) shall be paid under Item 751 and Item 765, respectively.

ITEM 874.7 MISCELLANEOUS SIGNS REMOVED AND STACKED EACH

The work to be done under this Item shall consist of the dismantling, removing, and stacking of all miscellaneous signs and their supports as noted on the plans and/or as directed by the Engineer.

Also included is the excavation of the existing foundations. If, in the opinion of the Engineer, the existing foundation will not interfere with new construction, it may be removed to a depth of 6 inch below the existing ground, the hole backfilled with gravel and compacted, and the existing surfaces restored or replaced in kind. The existing sign panels and supports, under this Item, shall be stacked on the sign owner's property as directed by the engineer

The existing signs shall not be removed until the new signs and structures replacing them unless otherwise directed by the Engineer.

METHOD OF MEASUREMENT

Item 874.7 will be measured for payment per each miscellaneous signs removed and stacked.

BASIS OF PAYMENT

Item 874.7 will be paid at the Contract unit price per Each, for Item 874.7. Miscellaneous Signs Removed and Stacked, which price shall be full compensation for dismantling, removing, and stacking of the signs and their supports, excavation and disposal of the existing foundation, supplying and placing of gravel backfill and compaction, and the restoration or replacement in kind of disturbed surfaces.

Loam borrow and seeding, installed to restore the disturbed areas shall be paid under Item 751., 751.1, and Item 765. respectively.

<<<<<< **END OF DOCUMENT** >>>>>>

DOCUMENT A00802

DETAIL SHEETS

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THE COMMONWEALTH OF MASSACHUSETTS
MassDOT - HIGHWAY DIVISION
TEN PARK PLAZA, BOSTON, MA

PRELIMINARY ESTIMATE OF QUANTITIES - DETAIL SHEETS

TOWN/CITY: WAREHAM
STA. 3+00 to 45+00

TYPE OF PROJECT: Roadway Modernization

YEAR: Federal Fiscal Year 2026
ROAD: Marion Road (Route 6)
CLASS: Urban Principal Arterial
DATE: March 17, 2025

PAVEMENT NOTES

PROPOSED FULL DEPTH PAVEMENT

AREA = 90 SY

SURFACE: 1-3/4" HOT MIX ASPHALT SUPERPAVE SURFACE COURSE -
12.5 (SSC - 12.5) OVER

INTERMEDIATE: 2-1/4" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0)
OVER

BASE: 4-0" SUPERPAVE BASE COURSE - 37.5 (SBC-37.5) OVER

SUBBASE: 4" DENSE GRADED CRUSHED STONE OVER
8" GRAVEL BORROW (TYPE b)

PROPOSED PAVEMENT STANDARD MILLING

AREA = 17,243 SY

SURFACE: 1-3/4" HOT MIX ASPHALT SUPERPAVE SURFACE COURSE -
12.5 (SSC - 12.5) OVER

2-1/4" SUPERPAVE INTERMEDIATE COURSE – 19.0 (SIC-19.0)
OVER

VARIABLE DEPTH PAVEMENT STANDARD MILLING

PROPOSED PAVEMENT WIDENING LESS THAN 4'-0" WIDE

AREA = 642 SY

SURFACE: 1-3/4" HOT MIX ASPHALT SUPERPAVE SURFACE COURSE -
12.5 (SSC - 12.5) OVER

INTERMEDIATE: 2-1/4" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC-19.0)
OVER

BASE: 6" HIGH EARLY STRENGTH CEMENT CONCRETE BASE
COURSE OVER

SUBBASE: 8" GRAVEL BORROW (TYPE b)

PAVEMENT NOTES (Continued)**PROPOSED HOT MIX ASPHALT SIDEWALK****AREA = 1,820 SY**

SURFACE: 1-1/4" SUPERPAVE SURFACE COURSE - 9.5 (SSC-12.5)
OVER

BOTTOM COURSE: 1-3/4" SUPERPAVE SURFACE COURSE - 12.5 (SSC-12.5)
OVER

BASE: 8" GRAVEL BORROW (TYPE b)

PROPOSED HOT MIX ASPHALT DRIVEWAY/ SHARED USE PATH**AREA = 4,333 SY**

SURFACE: 1-1/2" SUPERPAVE SURFACE COURSE - 12.5 (SSC-12.5)
OVER

BOTTOM COURSE: 2-1/2" SUPERPAVE SURFACE COURSE - 12.5 (SIC-12.5)
OVER

BASE: 8" GRAVEL BORROW (TYPE b)

PROPOSED CEMENT CONCRETE PEDESTRIAN CURB RAMP**AREA = 890 SY**

SURFACE: 4" CEMENT CONCRETE OVER

BASE: 8" GRAVEL BORROW (TYPE b)

PROPOSED CEMENT CONCRETE AT DRIVEWAYS**AREA = 1,155 SY**

SURFACE: 6" CEMENT CONCRETE OVER

BASE: 8" GRAVEL BORROW (TYPE b)

PROPOSED BRICK WALK**AREA = 6 SY**

SURFACE: 2" BRICK PAVERS OVER

BASE: 2" SAND OVER

SUBBASE: 6" GRAVEL BORROW, TYPE B

GENERAL PAVEMENT NOTES:

1. ASPHALT EMULSION FOR TACK COAT SHALL BE APPLIED BETWEEN ALL ASPHALT SURFACES AND SAWCUT JOINTS BEFORE PAVING. HMA JOINT ADHESIVE SHALL BE APPLIED TO ALL COLD JOINTS (LONGITUDINAL AND TRANSVERSE) BEFORE PAVING SURFACE COURSE. ASPHALT EMULSION FOR TACK COAT SHALL BE APPLIED AT A RATE CONSISTENT WITH STANDARD SPECIFICATION 450.43G2. ALL SURFACES SHALL BE CLEAN OF ALL ORGANICS, DEBRIS, AND SAND PRIOR TO PAVING.
2. ASPHALT EMULSION FOR TACK COAT SHALL BE ANIONIC EMULSION GRADE RS-1H TO RESIST TRACKING OF TACK BY HAUL VEHICLES.

ITEM 102.1 **TREE TRIMMING****MARION ROAD**

STA 10+09, RT TO STA 13+60, RT

STA 14+35, RT TO STA 14+52, RT

STA 27+54, LT TO STA 28+92, LT

STA 27+80, RT TO STA 28+00, RT

STA 36+84, RT TO STA 37+44, RT

STA 37+60, LT TO STA 39+41, LT

STA 38+58, RT TO STA 39+51, RT

STA 40+21, RT TO STA 41+26, RT

SWIFTS BEACH ROAD

STA 101+36 RT TO STA 103+58, RT

ITEM 102.2 **TREE TRIMMING****MARION ROAD**

STA 17+67, RT

STA 19+65, RT

STA 23+05, RT

STA 24+10, RT

STA 34+44, LT

STA 34+86, LT

STA 35+25, LT

STA 35+62, LT

STA 35+96, LT

ITEM 102.513 **TREE PROTECTION – AIR EXCAVATION AND ROOT PRUNING****MARION ROAD**

STA 19+55, RT TO STA 19+90, RT

STA 25+70, RT TO STA 34+55, RT

ITEM 102.533 **TREE CARE – WATERING****MARION ROAD**

STA 19+55, RT TO STA 19+90, RT

STA 25+70, RT TO STA 34+55, RT

ITEM 103. **TREE REMOVED – DIAMETER UNDER 24 INCHES****MARION ROAD**

STA 23+00, RT

SWIFTS BEACH ROAD

STA 101+85, RT

ITEM 104. **TREE REMOVED – DIAMETER 24 INCHES AND OVER****MARION ROAD**

STA 14+45, LT

STA 43+25, RT

SWIFTS BEACH ROAD

STA 43+25, RT

ITEM 120.1 **UNCLASSIFIED EXCAVATION**

EXCAVATE THE FOLLOWING AREAS:

- FOR PROPOSED ROADWAY WIDENING
- FOR PROPOSED DRIVEWAYS, SIDEWALKS, SHARED USE PATHS, AND PEDESTRIAN CURB RAMPS.
- ELSEWHERE AS REQUIRED

ITEM 141.1 **TEST PIT FOR EXPLORATION**

USE TO LOCATE UNDERGROUND UTILITIES AND IDENTIFY CULVERT DIMENSIONS OR ELSEWHERE AS DETERMINED BY THE ENGINEER.

ITEM 151. **GRAVEL BORROW**

GRAVEL BORROW (TYPE B) ARE USED AT THE FOLLOWING LOCATIONS:

- FULL DEPTH PAVEMENT AND ROADWAY WIDENING LESS THAN 4' WIDE
- FOR PROPOSED DRIVEWAYS, SIDEWALKS, SHARED USE PATHS, PEDESTRIAN CURB RAMPS, AND BRICK WALKS.
- ELSEWHERE AS DETERMINED BY THE ENGINEER

ITEM 151.2 **GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES**

GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES ARE USED AT THE FOLLOWING LOCATIONS:

- FOR REMOVED AND PROPOSED DRAINAGE STRUCTURE AREAS
- FOR DRAINAGE PIPE TRENCHES.

ITEM 154. **SAND BORROW**

FOR BRICK WALKS OR ELSEWHERE AS DIRECTED BY THE ENGINEER.

ITEM 156. **CRUSHED STONE**

FOR STABILIZATION OF REMOVED AND RESET HYDRANTS AND PROPOSED DRAINAGE STRUCTURES IF UNSUITABLE MATERIAL IS ENCOUNTERED AS DIRECTED BY THE ENGINEER.

ITEM 170. **FINE GRADING AND COMPACTING - SUBGRADE AREA**

FINE GRADE AND COMPACT SUBGRADE AT THE FOLLOWING LOCATIONS:

- FULL DEPTH PAVEMENT AND ROADWAY WIDENING LESS THAN 4' WIDE
- FOR PROPOSED DRIVEWAYS, SIDEWALKS, SHARED USE PATHS, AND PEDESTRIAN CURB RAMPS.
- ELSEWHERE AS DETERMINED BY THE ENGINEER

ITEM 183.1 **TREATMENT OF CONTAMINATED GROUNDWATER**

IN ACCORDANCE WITH SPECIAL PROVISION FOR TREATMENT OF CONTAMINATED GROUNDWATER, WHICH MAY BE ENCOUNTERED DURING EXCAVATION WORK IN THE VICINITY OF 204 MARION ROAD AND 127 MARION ROAD.

ITEM 220. **DRAINAGE STRUCTURE ADJUSTED**

TO ADJUST RETAINED AND PROPOSED DRAINAGE STRUCTURES WITHIN THE PAVING LIMITS TO FINAL GRADE.

ITEM 227.4 **MASONRY PLUG**

- AT LOCATIONS OF PLUGGED AND ABANDONED 12" DRAINAGE PIPES CONNECTING TO RETAINED DRAINAGE STRUCTURES

MARION ROAD

STA 17+25, LT – EXIST DMH	STA 18+25, RT – PROP CIT	STA 21+80, RT – PROP DMH
STA. 25+60, LT – EXIST DMH	STA 33+95, RT – EXIST DMH	STA 36+80, RT – EXIST DMH
STA 40+45, RT – EXIST DMH	STA 41+55, RT – PROP CB	STA 44+05, RT – PROP CIT

- AT LOCATIONS OF ABANDONED 8" WATER PIPES CONFLICTING WITH PROPOSED CATCH BASINS.

MARION ROAD

STA 8+65, RT	STA 8+90, RT	STA 11+15, RT	STA 13+05, RT	STA 40+55, RT

ITEM 303.06 **6 INCH DUCTILE IRON WATER PIPE (MECHANICAL JOINT)**

FOR RELOCATION OF HYDRANTS

MARION ROAD

STA 11+43, RT	STA 16+53, RT	STA 20+60, RT
STA 36+59, RT	STA 41+31, RT	

ITEM 309. **DUCTILE IRON FITTINGS FOR WATER PIPE**

AT R&R HYDRANT AND NEW HYDRANT LOCATIONS

MARION ROAD

STA 11+43, RT	STA 16+53, RT	STA 20+60, RT
STA 36+59, RT	STA 41+31, RT	

ITEM 350.06 **6 INCH GATE AND GATE BOX**

FOR RELOCATION OF HYDRANTS

ITEM 358. **GATE BOX ADJUSTED****MARION ROAD**

STA 9+55, RT	STA 15+35, RT	STA 15+45, RT
STA 15+95, RT	STA 16+30, RT	STA 20+60, RT
STA 21+11, RT	STA 23+70, RT	STA 26+50, RT
STA 26+75, RT	STA 30+60, RT	STA 32+70, RT
STA 35+24, RT	STA 35+43, RT	STA 36+59, RT
STA 43+80, RT		

SWIFTS BEACH ROAD

STA 102+20, LT

GIBBS AVE

STA 150+89, LT

ITEM 367.08 **8 INCH CAST IRON PLUG****MARION ROAD**

STA 8+65, RT	STA 8+72, RT	STA 8+85, RT
STA 8+92, RT	STA 11+09, RT	STA 11+16, RT
STA 12+99, RT	STA 13+07, RT	STA 33+41, RT
STA 33+49, RT	STA 35+47, RT	STA 35+54, RT
STA 40+50, RT	STA 40+57, RT	

ITEM 370.4 **12 X 6 INCH TAPPING SLEEVE, VALVE AND BOX****MARION ROAD**

STA 16+53, RT	STA 36+82, RT

ITEM 376.2 **HYDRANT – REMOVED AND RESET****MARION ROAD**

STA 11+43, RT

STA 16+53, RT

STA 20+60, RT

STA 36+59, RT

STA 41+31, RT

ITEM 376.5 **HYDRANT – ADJUSTED****MARION ROAD**

STA 26+52, RT

ITEM 390. **LAWN IRRIGATION SYSTEM REMOVED AND RESET**

DUNKINS PLAZA				
STA 17+00, LT				
DOMINOS				
STA 18+10, LT				
WAREHAM PLAZA				
STA 33+00, LT				

ITEM 451. **HMA FOR PATCHING**

FOR PERMANENT PAVEMENT PATCHES OF TEST PIT LOCATIONS, FOR PROPOSED SIGNAL CONDUIT AND DRAINAGE STRUCTURE AND PIPE TRENCHES IN AREAS OF EXISTING PAVEMENT AND PROPOSED PAVEMENT MILLING AND RESURFACING, AND FOR FILLING OF POTHOLES THAT OCCUR PRIOR TO FINAL PAVEMENT.

ITEM 472. **TEMPORARY ASPHALT PATCHING**

FOR TEMPORARY RAMPS FOR CHANGE IN GRADE AND DRIVEWAY ACCESS, FOR EMERGENCY REPAIRS, FOR 4" DEEP TEMPORARY PATCHING OF TRENCHES FOR SIGNAL CONDUIT AND DRAINAGE STRUCTURES AND PIPE TRENCHES, AND FOR TEMPORARY PAVEMENT WEDGES AT FULL DEPTH WORK LIMITS AND AT WHEELCHAIR RAMPS.

ITEM 482.5 **SAWCUTTING ASPHALT PAVEMENT FOR BOX WIDENING**

FOR AREAS OF BOX WIDENING OR NARROWING (WHERE CURB IS MOVING BY MORE THAN 6"), EXISTING DRIVEWAY AND WHEELCHAIR RAMP OPENINGS IN AREAS OF MILLING AND RESURFACING, AND AT LIMITS OF DRIVEWAY RECONSTRUCTION.

ALL OTHER SAWCUTS ARE INCIDENTAL TO EITHER HMA ITEMS OR CURB R&R ITEM.

ITEM 506. GRANITE CURB TYPE VB – STRAIGHT**MARION ROAD**

STA	OFFSET		TO	STA	OFFSET	
6+00.00	21.89'	RT	-	6+51.56	20.93'	RT
6+00.00	21.97'	LT	-	7+18.07	22.00'	LT
6+81.75	20.40'	RT	-	7+72.90	18.50'	RT
7+48.22	21.12'	LT	-	7+60.74	20.74'	LT
7+90.89	19.85'	LT	-	9+10.29	16.26'	LT
8+27.08	17.43'	RT	-	9+10.46	16.00'	RT
9+26.95	16.00'	RT	-	9+32.86	16.00'	RT
9+52.58	39.56'	RT	-	9+52.80	37.45'	RT
9+34.61	16.00'	LT	-	9+68.94	16.00'	LT
9+71.01	46.41'	RT	-	9+73.54	37.26'	RT
9+94.65	16.00'	RT	-	11+40.07	16.00'	RT
10+10.10	16.00'	LT	-	10+79.46	16.13'	LT
11+09.63	16.39'	LT	-	11+48.00	16.92'	LT
11+78.18	17.50'	LT	-	11+91.04	17.76'	LT
11+70.05	45.45'	RT	-	11+70.36	51.32'	RT
11+94.18	51.76'	RT	-	11+93.86	46.62'	RT
12+23.68	16.00'	RT	-	14+30.20	16.00'	RT
12+22.60	18.43'	LT	-	13+14.96	20.56'	LT
13+45.22	21.30'	LT	-	14+30.20	23.78'	LT
14+45.53	24.16'	LT	-	14+49.53	24.26'	LT
14+76.44	24.82'	LT	-	14+97.61	25.19'	LT
15+27.77	25.60'	LT	-	15+43.82	25.76'	LT
15+66.99	26.00'	LT	-	16+09.77	26.00'	LT
15+99.80	16.00'	RT	-	16+07.90	16.06'	RT
16+06.79	37.63'	RT	-	16+10.10	37.50'	RT
16+39.93	26.00'	LT	-	17+23.30	26.00'	LT
16+52.06	16.00'	RT	-	16+81.38	16.00'	RT
17+11.55	16.00'	RT	-	19+24.80	16.00'	RT
17+60.74	25.89'	LT	-	18+50.06	25.71'	LT
19+05.92	58.80'	LT	-	19+05.94	54.39'	LT
19+35.35	24.52'	LT	-	19+54.69	24.13'	LT

ITEM 506. (Continued)

19+48.31	30.26'	LT		-		19+54.47	30.63'	LT
19+54.97	16.00'	RT		-		19+91.15	16.00'	RT
19+86.85	23.35'	LT		-		20+28.49	22.17'	LT
19+87.01	21.36'	LT		-		19+99.76	29.01'	LT
20+21.32	16.00'	RT		-		20+67.42	16.00'	RT
20+48.21	53.75'	LT		-		20+48.30	37.09'	LT
20+70.64	53.85'	LT		-		20+70.73	35.10'	LT
20+84.12	20.26'	LT		-		21+74.08	16.50'	LT
21+41.15	16.00'	RT		-		22+14.30	16.01'	RT
22+19.55	16.01'	LT		-		22+44.23	15.94'	LT
22+70.50	16.00'	RT		-		23+21.55	16.00'	RT
22+73.95	16.00'	LT		-		22+95.33	16.00'	LT
23+25.05	16.00'	LT		-		23+56.29	16.00'	LT
23+82.26	16.03'	LT		-		24+16.20	16.00'	LT
23+93.56	70.22'	LT		-		23+96.83	29.35'	LT
23+99.75	26.50'	LT		-		24+29.14	26.50'	LT
23+52.19	16.00'	RT		-		24+82.65	16.00'	RT
24+82.69	26.50'	LT		-		25+09.72	26.50'	LT
25+17.78	16.00'	RT		-		26+39.98	16.00'	RT
25+54.20	35.34'	LT				25+58.68	25.88'	LT
25+81.30	16.00'	LT		-		29+08.14	22.60'	LT
27+12.10	16.00'	RT		-		28+30.16	23.92'	RT
28+59.13	16.00'	RT		-		30+30.45	16.00'	RT
30+01.03	25.64'	LT		-		31+82.50	26.01'	LT
31+02.47	16.04'	RT		-		32+06.07	16.00'	RT
31+99.64	40.00'	LT		-		32+00.55	53.12'	LT
31+17.91	42.84'	LT		-		32+18.01	52.04'	LT
32+36.50	26.00'	LT		-		33+07.43	26.00'	LT
32+36.92	46.82'	RT		-		32+36.80	53.15'	RT
32+71.98	47.97'	RT		-		32+72.53	53.40'	RT
33+02.79	16.00'	RT		-		33+07.19	16.00'	RT
33+28.07	16.00'	RT		-		34+20.15	16.00'	RT
34+40.88	16.06'	RT		-		34+58.31	16.00'	RT

ITEM 506. (Continued)

34+46.92	26.00'	LT	-	35+95.35	26.00'	LT
34+88.38	39.49'	RT	-	34+91.30	51.04'	RT
35+53.51	15.97'	RT	-	37+88.09	16.00'	RT
150+93.28	12.35'	RT	-	150+97.29	12.35'	RT
36+98.39	25.03'	LT	-	40+18.70	16.95'	LT
38+42.28	16.00'	RT	-	39+80.28	16.00'	RT
40+34.20	16.00'	RT	-	42+66.94	16.00'	RT
40+49.03	16.40'	LT	-	41+07.07	16.00'	LT
41+37.24	16.00'	LT	-	41+64.40	16.00'	LT
41+94.57	16.00'	LT	-	42+26.05	16.00'	LT
42+54.49	16.00'	LT	-	42+86.28	16.00'	LT
43+16.44	16.00'	LT	-	43+45.63	16.00'	LT
43+21.11	16.00'	RT	-	43+55.53	16.00'	RT
43+75.89	16.00'	LT	-	44+32.04	18.26'	LT
43+77.57	36.32'	RT	-	43+77.62	56.49'	RT
44+06.86	57.12'	RT	-	44+07.06	47.72'	RT
44+56.21	18.30'	LT	-	44+66.25	18.28'	LT
44+55.04	18.21'	RT	-	44+66.25	18.21'	RT

SWIFTS BEACH ROAD

STA	OFFSET		TO	STA	OFFSET	
100+59.51	6.99'	LT	-	100+65.25	6.69'	LT
100+62.68	21.24'	LT	-	100+71.51	15.87'	LT
101+19.80	10.74'	LT	-	101+45.40	12.87'	LT
101+79.11	15.22'	LT	-	102+26.59	16.06'	LT
100+68.43	17.11'	LT	-	15+86.80	38.07'	RT

ITEM 506.1 **GRANITE CURB TYPE VB - CURVED****MARION ROAD**

STA	OFFSET		TO	STA	OFFSET	
9+32.86	16.00'	RT	-	9+39.99	17.32'	RT
9+52.22	31.00'	RT	-	9+52.29	40.74'	RT
9+87.48	17.33'	RT	-	9+94.65	16.00'	RT
11+40.07	16.00'	RT	-	11+50.19	17.76'	RT
11+68.66	36.93'	RT	-	11+70.05	45.45'	RT
11+93.86	46.62'	RT	-	11+95.22	36.94'	RT
12+13.70	17.72'	RT	-	12+23.68	16.00'	RT
14+48.15	16.52'	RT	-	14+71.97	29.79'	RT
15+38.96	39.69'	RT	-	15+50.53	30.70'	RT
15+66.48	22.40'	RT	-	15+99.80	16.00'	RT
16+10.10	37.50'	RT	-	16+15.56	31.03'	RT
18+50.06	25.71'	LT	-	18+59.55	27.17'	LT
18+76.92	42.01'	LT	-	18+77.48	56.31'	LT
19+05.94	54.39'	LT	-	19+09.67	40.02'	LT
19+27.52	25.75'	LT	-	19+35.35	24.52'	LT
20+67.42	16.00'	RT	-	20+75.83	17.46'	RT
20+77.50	22.63'	LT	-	20+84.12	20.26'	LT
21+32.52	17.27'	RT	-	21+41.15	16.00'	RT
23+96.83	29.35'	LT	-	23+99.75	26.50'	LT
24+16.20	16.00'	LT	-	24+19.64	16.00'	LT
24+91.47	16.02'	LT	-	24+98.56	16.02'	LT
25+72.99	16.01'	LT	-	25+81.30	16.00'	LT
26+39.98	16.00'	RT	-	26+47.56	17.18'	RT
27+03.80	17.17'	RT	-	27+12.10	16.00'	RT
29+29.70	33.49'	RT	-	29+35.83	47.22'	RT
29+66.23	47.05'	RT	-	29+72.92	34.93'	RT
30+30.45	16.00'	RT	-	30+36.54	16.92'	RT
30+90.18	17.47'	RT	-	31+02.47	16.04'	RT
31+99.80	45.62'	LT	-	32+00.27	49.04'	LT
32+06.07	16.00'	RT	-	32+12.45	16.66'	RT
32+18.20	55.99'	LT	-	32+19.34	42.60'	LT
32+35.00	35.81'	RT	-	33+36.92	46.82'	RT

ITEM 506.1 (Continued)

32+71.98	47.97'	RT		-		32+73.85	35.81'	RT
32+38.08	26.37'	LT		-		32+42.06	26.01'	LT
32+94.39	17.15'	RT		-		33+02.79	16.00'	RT
33+28.92	27.52'	LT		-		33+34.26	29.53'	LT
33+49.20	41.87'	LT		-		33+56.75	66.69'	LT
33+97.61	42.25'	LT		-		34+03.61	66.32'	LT
34+10.38	30.77'	LT		-		34+22.80	26.48'	LT
34+58.31	16.00'	RT		-		34+67.89	17.49'	RT
34+87.25	35.81'	RT		-		34+88.38	39.49'	RT
35+16.71	49.00'	RT		-		35+18.53	35.82'	RT
35+38.68	17.26'	RT		-		35+50.48	16.00'	RT
35+95.35	26.00'	LT		-		36+13.53	29.42'	LT
150+38.24	17.36'	LT		-		150+95.53	12.43'	LT
150+52.69	24.43'	RT		-		150+93.28	12.35'	RT
36+92.34	26.77'	LT		-		36+98.6	25.93'	LT
43+55.53	16.00'	RT		-		43+61.50	16.87'	RT
44+07.06	47.72'	RT		-		44+09.49	36.52'	RT
44+29.22	19.40'	RT		-		44+34.71	18.46'	RT
15+86.80	38.07'	RT		-		16+12.98	36.61'	RT

SWIFTS BEACH ROAD

STA	OFFSET			TO		STA	OFFSET	
100+66.65	45.75'	RT		-		100+93.12	26.39'	RT
100+35.69	19.87'	LT		-		100+61.80	16.00'	LT

ITEM 509. GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS – STRAIGHT

FOR INSTALLATION ALONG PEDESTRIAN CURB RAMPS AND DRIVEWAY APRONS THAT ARE LOCATED ON A TANGENT OR A CURVE OF RADIUS GREATER THAN 100 FEET

MARION ROAD

STA	OFFSET		TO	STA	OFFSET	
6+51.56	20.93'	RT	-	6+57.97	21.90'	RT
6+74.22	20.40'	RT	-	6+81.75	20.33'	RT
7+18.07	22.00'	LT	-	7+24.56	21.83'	LT
7+40.56	21.35'	LT	-	7+48.22	21.12'	LT
7+60.74	20.75'	LT	-	7+68.41	20.52'	LT
7+72.90	18.35'	RT	-	7+80.57	18.35'	RT
7+84.40	20.04'	LT	-	7+90.89	19.85'	LT
8+20.57	17.56'	RT	-	8+27.08	17.43'	RT
9+10.46	16.00'	RT	-	9+16.95	16.00'	RT
9+10.29	16.26'	LT	-	9+16+78	16.06'	LT
9+26.95	16.00'	LT	-	9+34.61	16.00'	LT
9+26.95	16.00'	RT	-	9+32.86	16.00'	RT
9+51.04	45.87'	RT	-	9+52.58	39.56'	RT
9+69.28	52.67'	RT	-	9+71.01	46.41'	RT
9+73.54	37.26'	RT	-	9+75.28	31.00'	RT
9+68.94	16.00'	LT	-	9+75.49	16.03'	LT
10+02.38	16.03'	LT	-	10+10.10	16.00'	LT
10+79.46	16.13'	LT	-	10+85.96	16.17'	LT
11+01.83	16.31'	LT	-	11+09.63	16.39'	LT
11+48.00	16.92'	LT	-	11+54.50	17.04'	LT
11+70.50	17.33'	LT	-	11+78.18	17.50'	LT
11+91.04	17.76'	LT	-	11+97.55	17.89'	LT
12+13.59	18.23'	LT	-	12+21.27	18.23'	LT
13+14.96	20.56'	LT	-	13+21.47	20.71'	LT
13+37.51	21.11'	LT	-	13+45.22	21.30'	LT
14+30.20	23.78'	LT	-	14+36.70	23.94'	LT
14+30.20	16.01'	RT	-	14+36.70	16.00'	RT
14+41.70	24.07'	LT	-	14+45.53	24.16'	LT

ITEM 509. (Continued)

14+49.53	24.26'	LT		-		14+52.78	24.33'	LT
14+68.77	24.65'	LT		-		14+76.44	24.82'	LT
14+97.61	25.19'	LT		-		15+04.11	25.28'	LT
15+20.10	25.49'	LT		-		15+27.77	25.60'	LT
15+43.82	25.76'	LT		-		15+51.49	25.82'	LT
15+60.49	25.88'	LT		-		15+66.99	26.00'	LT
16+09.77	26.00'	LT		-		16+17.43	26.00'	LT
16+33.43	26.00'	LT		-		16+39.93	26.00'	LT
16+10.53	16.00'	RT		-		16+15.56	16.00'	RT
16+45.56	16.00'	RT		-		16+52.06	16.00'	RT
16+81.38	16.00'	RT		-		16+89.05	16.00'	RT
17+05.05	16.00'	RT		-		17+11.55	16.00'	RT
17+23.30	26.00'	LT		-		17+29.86	26.00'	LT
17+50.28	26.00'	LT		-		17+57.97	25.89'	LT
17+50.28	26.00'	LT		-		17+57.97	25.89'	LT
19+24.80	16.00'	RT		-		19+31.30	16.00'	RT
19+47.30	16.00'	RT		-		19+54.97	16.00'	RT
19+54.69	24.13'	LT		-		19+62.36	23.95'	LT
19+80.35	23.54'	LT		-		19+86.85	23.35'	LT
19+54.47	30.63'	LT		-		19+62.48	30.46'	LT
19+80.49	29.04'	LT		-		19+87.01	29.36'	LT
19+91.15	16.00'	RT		-		19+98.82	16.00'	RT
20+14.82	16.00'	RT		-		20+21.32	16.00'	RT
21+74.08	16.50'	LT		-		21+81.63	16.30'	LT
22+13.14	16.00'	LT		-		22+19.55	16.01'	LT
22+17.27	16.00'	RT		-		22+25.05	16.00'	RT
22+63.90	16.00'	RT		-		22+70.50	16.00'	RT
22+44.23	15.94'	LT		-		22+51.79	16.00'	LT
22+67.55	16.00'	LT		-		22+73.95	16.00'	LT
22+95.33	16.00'	LT		-		23+02.88	16.00'	LT
23+18.66	16.00'	LT		-		23+25.05	16.00'	LT
23+21.55	16.00'	RT		-		23+29.34	16.00'	RT

ITEM 509. (Continued)

23+45.59	16.00'	RT	-	23+52.19	16.00'	RT
23+56.29	16.00'	LT	-	23+63.84	16.00'	LT
23+75.86	16.00'	LT	-	23+82.26	16.00'	LT
24+82.65	16.00'	RT	-	24+91.92	16.00'	RT
25+08.17	16.00'	RT	-	25+14.87	16.00'	RT
28+27.63	16.00'	RT	-	28+34.13	16.00'	RT
28+50.13	16.00'	RT	-	28+59.13	16.00'	RT
31+82.50	26.01'	LT	-	31+85.14	26.01'	LT
32+32.51	26.00'	LT	-	32+36.50	26.00'	LT
33+07.19	16.00'	RT	-	33+13.81	16.00'	RT
33+07.43	26.00'	LT	-	33+13.81	26.00'	LT
33+18.89	15.98'	RT	-	33+28.07	16.00'	RT
34+20.15	16.00'	RT	-	34+26.72	16.00'	RT
34+31.79	16.00'	RT	-	34+40.88	16.00'	RT
34+31.72	26.00'	LT	-	34+40.58	26.00'	LT
37+88.09	16.00'	RT	-	37+94.64	16.00'	RT
38+34.65	16.00'	RT	-	38+42.28	16.00'	RT
39+80.28	16.00'	RT	-	39+86.75	16.00'	RT
40+18.70	16.95'	LT	-	40+25.23	16.82'	LT
40+26.57	16.00'	RT	-	40+34.20	16.00'	RT
40+41.29	16.53'	LT	-	40+49.03	16.40'	LT
41+07.07	16.00'	LT	-	41+13.57	16.00'	LT
41+29.57	16.00'	LT	-	41+37.24	16.00'	LT
41+64.40	16.00'	LT	-	41+70.90	16.00'	LT
41+86.90	16.00'	LT	-	41+94.57	16.00'	LT
42+26.05	16.00'	LT	-	42+32.55	16.00'	LT
42+46.83	16.00'	LT	-	42+54.49	16.00'	LT
42+66.94	16.00'	RT	-	42+73.44	16.00'	RT
42+86.28	16.00'	LT	-	42+92.78	16.00'	LT
43+08.78	16.00'	LT	-	43+16.44	16.00'	LT
43+13.44	16.00'	RT	-	43+21.11	16.00'	RT
43+45.63	16.00'	LT	-	43+52.23	16.00'	LT

ITEM 509. (Continued)

43+68.23	16.00'	LT		-		43+75.89	16.00'	LT
44+37.04	18.36'	RT		-		44+38.54	18.35'	RT
44+32.04	18.26'	LT		-		44+38.54	18.32'	LT
44+48.54	18.31'	LT		-		44+56.21	18.30'	LT
44+48.54	18.23'	RT		-		44+55.04	18.21'	RT

SWIFTS BEACH ROAD

STA	OFFSET			TO		STA	OFFSET	
100+65.25	6.69'	LT		-		100+73.52	6.90'	LT
100+93.12	26.39'	RT		-		100+99.48	25.04'	RT
101+13.35	10.21'	LT		-		101+19.80	10.74'	LT
101+45.40	12.87'	LT		-		101+53.01	13.51'	LT
101+72.65	14.89'	LT		-		101+79.11	15.22'	LT
100+71.63	15.06'	LT		-		100+68.43	17.11'	LT

ITEM 509.1**GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS – CURVED**

FOR INSTALLATION ALONG PEDESTRIAN CURB RAMPS AND DRIVEWAY APRONS THAT ARE LOCATED ON A CURVE OF RADIUS 100 FEET OR LESS

MARION ROAD

STA	OFFSET			TO		STA	OFFSET	
9+39.99	17.32'	RT		-		9+45.63	20.61'	RT
9+52.22	31.00'	RT		-		9+52.80	37.45'	RT
9+81.87	20.62'	RT		-		9+87.48	17.33'	RT
11+50.19	17.76'	RT		-		11+56.02	20.60'	RT
11+66.03	31.00'	RT		-		11+68.66	36.93'	RT
11+95.22	36.94'	RT		-		11+97.82	31.00'	RT
12+07.89	20.56'	RT		-		12+13.70	17.72'	RT
14+41.70	16.00'	RT		-		14+48.15	16.52'	RT
14+71.97	29.79'	RT		-		14+75.81	35.03'	RT
15+60.53	25.03'	RT		-		15+66.48	22.40'	RT
15+90.50	18.26'	RT		-		15+98.18	16.85'	RT
16+07.36	16.06'	RT		-		16+10.53	16.00'	RT
16+12.98	36.61'	RT		-		16+15.56	31.03'	RT

ITEM 509.1 (Continued)

17+52.96	26.14'	LT		-		17+60.74	25.89'	LT
18+59.55	27.17'	LT		-		18+71.47	34.43'	LT
18+71.47	34.43'	LT		-		18+77.72	43.51'	LT
19+08.30	42.83'	LT		-		19+14.38	33.64'	LT
19+19.06	29.71'	LT		-		19+27.52	25.75'	LT
20+28.49	22.17'	LT		-		20+36.42	23.91'	LT
20+77.50	22.63'	LT		-		20+84.12	20.26'	LT
20+75.83	17.46'	RT		-		20+81.86	20.59'	RT
21+27.95	19.06'	RT		-		21+32.52	17.27'	RT
24+19.64	16.00'	LT		-		24+27.44	18.07'	LT
24+31.33	21.50'	LT		-		24+29.14	26.50'	LT
24+80.49	21.50'	LT		-		24+82.69	26.50'	LT
24+84.74	17.87'	LT		-		24+91.47	16.02'	LT
24+98.56	16.02'	LT		-		25+07.67	17.86'	LT
25+11.92	21.50'	LT		-		25+09.72	26.50'	LT
25+58.68	25.88'	LT		-		25+61.39	21.50'	LT
25+66.16	17.77'	LT		-		25+72.99	16.01'	LT
26+47.56	17.18'	RT		-		26+54.42	20.59'	RT
26+96.16	20.58'	RT		-		27+03.80	17.17'	RT
29+08.14	22.60'	LT		-		29+19.04	25.19'	LT
29+25.14	28.93'	LT		-		29+29.70	33.49'	LT
29+72.92	34.92'	LT		-		29+77.75	30.69'	LT
29+84.07	27.37'	LT		-		29+95.13	25.56'	LT
30+36.54	16.92'	RT		-		30+42.08	19.59'	RT
30+85.14	19.55'	RT		-		30+90.18	17.47'	RT
31+85.14	26.01'	LT		-		31+92.55	28.12'	LT
31+97.88	33.76'	LT		-		31+99.64	40.00'	LT
32+12.45	16.66'	RT		-		32+20.52	19.55'	RT
32+25.00	28.11'	LT		-		32+32.51	26.00'	LT
32+32.04	30.00'	RT		-		32+35.00	35.81'	RT
32+73.85	35.81'	RT		-		32+76.82	30.00'	RT
32+88.33	19.55'	RT		-		32+94.39	17.15'	RT

ITEM 509.1 (Continued)

33+18.79	26.00'	LT		-		33+28.92	27.52'	LT
33+34.26	29.53'	LT		-		33+40.62	33.40'	LT
33+45.01	37.00'	LT		-		33+49.20	41.87'	LT
34+01.74	37.31'	LT		-		33+97.61	42.25'	LT
34+06.06	33.56'	LT		-		34+10.38	30.77'	LT
34+22.80	26.48'	LT		-		34+26.50	26.25'	LT
34+67.83	17.49'	RT		-		34+72.77	19.56'	RT
34+84.29	30.00'	RT		-		34+87.25	35.81'	RT
34+18.53	35.82'	RT		-		35+21.47	30.00'	RT
35+32.99	19.56'	RT		-		35+38.68	17.26'	RT
36+13.53	29.42'	LT		-		36+20.11	32.56'	LT
36+24.83	35.61'	LT		-		36+31.32	41.26'	LT
36+75.25	42.82'	LT		-		36+79.17	35.52'	LT
36+83.69	31.03'	LT		-		36+92.34	26.77'	LT
43+61.50	16.87'	RT		-		43+67.56	19.58'	RT
43+76.03	30.01'	RT		-		43+77.57	36.32'	RT
44+09.49	36.52'	RT		-		44+13.32	30.01'	RT
44+25.98	20.48'	RT		-		44+29.80	19.25'	RT
44+35.29	18.42'	RT		-		44+37.04	18.36'	RT

SWIFTS BEACH ROAD

STA	OFFSET			TO		STA	OFFSET	
100+51.85	7.97'	LT		-		100+59.51	6.99'	LT
100+73.20	37.18'	RT		-		100+78.16	32.98'	RT
100+71.63	15.06'	LT		-		100+73.00	12.75'	LT

ITEM 514. **GRANITE CURB INLET – STRAIGHT****MARION ROAD**

STA, OFFSET
8+68.53, LT
8+88.52, RT
8+88.52, LT
11+12.16, RT
11+17.47, LT
13+02.81, RT
13+02.80, LT
17+16.65, RT
17+16.65, LT
17+41.65, RT
18+19.49, RT
20+29.98, RT
21+71.09, RT
22+23.85, LT
23+73.91, RT
25+17.83, RT
26+96.65, LT
27+52.99, RT
27+52.99, LT
27+79.22, LT
27+72.99, RT
29+98.08, LT
30+03.92, RT
34+43.53, LT
35+50.48, RT
37+02.15, RT
38+51.79, LT
38+49.97, RT
37+48.60, LT
41+50.00, LT

ITEM 580. CURB REMOVED AND RESET**MARION ROAD**

STA	OFFSET		TO	STA	OFFSET	
6+00.00	21.97'	LT	-	6+38.99	22.18'	LT
6+00.00	21.89'	RT	-	6+59.60	21.90'	RT
6+69.16	22.23'	LT	-	7+23.54	22.07'	LT
6+77.97	22.00'	RT	-	7+68.30	21.92'	RT
7+52.56	22.25'	LT	-	7+61.13	22.19'	LT
8+20.13	22.01'	RT	-	8+89.97	22.04'	RT
7+90.10	22.32'	LT	-	9+73.91	22.19'	LT
9+69.28	52.67'	RT	-	9+76.40	30.43'	RT
9+89.65	21.80'	RT	-	11+21.03	21.97'	RT
10+05.17	22.24'	LT	-	10+77.65	22.17'	LT
11+07.24	22.35'	LT	-	11+54.54	22.18'	LT
11+66.46	22.04'	RT	-	12+67.09	22.17'	RT
11+76.54	22.31'	LT	-	11+92.00	22.26'	LT
12+17.38	22.15'	LT	-	13+16.99	22.69'	LT
13+16.78	21.76'	RT	-	14+51.92	21.59'	RT
13+43.03	22.98'	LT	-	14+44.40	22.38'	LT
14+77.65	35.38'	RT	-	14+81.94	58.37'	RT
14+70.66	22.33'	LT	-	15+03.63	22.25'	LT
15+21.27	22.32'	LT	-	15+77.27	22.25'	LT
16+26.85	22.56'	LT	-	16+70.61	22.68'	LT
16+75.73	22.69'	LT	-	17+33.33	22.70'	LT
17+07.31	21.48'	RT	-	19+31.83	21.47'	RT
17+62.15	22.79'	LT	-	18+77.48	56.31'	LT
19+54.90	21.47'	RT	-	19+96.20	21.46'	RT
19+94.40	22.95'	LT	-	20+25.76	23.02'	LT
20+17.14	21.49'	RT	-	20+82.85	21.66'	RT
20+99.49	23.18'	LT	-	21+83.47	22.62'	LT
21+22.24	21.96'	RT	-	22+21.99	22.16'	RT
22+19.74	22.95'	LT	-	22+42.11	23.58'	LT
22+69.13	25.16'	LT	-	23+00.10	28.40'	LT

ITEM 580. (Continued)

22+73.41	22.20'	RT		-		23+15.48	22.48'	RT
23+16.73	30.74'	LT		-		23+66.25	41.72'	LT
23+76.96	23.03'	RT		-		24+81.68	23.90'	RT
25+12.66	24.04'	RT		-		26+52.37	24.20'	RT
25+55.07	26.98'	RT		-		26+70.84	20.10'	RT
27+03.42	24.01'	RT		-		28+27.63	16.00'	RT
27+29.74	20.03'	LT		-		29+11.69	22.63'	LT
28+60.74	23.96'	RT		-		30+38.42	24.19'	RT
29+26.83	30.20'	LT		-		29+35.89	47.69'	LT
29+66.52	45.47'	LT		-		29+75.52	30.96'	LT
29+91.06	23.72'	LT		-		31+75.59	30.96'	LT
31+94.37	33.87'	LT		-		32+00.99	59.44'	LT
30+83.17	24.24'	RT		-		32+15.75	23.87'	RT
32+42.17	25.03'	LT		-		33+14.97	25.01'	LT
32+77.28	27.47'	RT		-		33+12.59	24.34'	RT
33+17.79	24.27'	RT		-		34+27.23	24.51'	RT
34+32.35	24.54'	RT		-		34+68.29	24.72'	RT
34+31.98	24.41'	LT		-		36+12.93	27.74'	LT
34+84.50	31.61'	RT		-		34+93.86	61.06'	RT
35+25.58	27.84'	RT		-		38+09.19	22.00'	RT
36+17.45	30.15'	LT		-		150+97.08	12.81'	LT
36+89.33	25.37'	LT		-		40+19.71	21.14'	LT
38+39.40	21.23'	RT		-		39+93.30	19.61'	RT
40+23.71	19.66'	RT		-		43+67.35	21.40'	RT
40+47.19	20.77'	LT		-		41+06.29	20.10'	LT
41+32.78	19.98'	LT		-		41+63.64	19.72'	LT
41+91.55	19.69'	LT		-		42+23.15	19.43'	LT
42+50.96	19.47'	LT		-		42+87.34	19.10'	LT
43+14.21	18.97'	LT		-		43+48.27	18.81'	LT
43+72.18	18.60'	LT		-		44+41.77	18.38'	LT
44+46.87	18.30'	LT		-		44+55.73	18.34'	LT

ITEM 580. (Continued)**SWIFTS BEACH ROAD**

STA	OFFSET		TO	STA	OFFSET	
101+31.48	18.85'	LT	-	101+50.52	18.07'	LT
101+77.30	17.12'	LT	-	102+26.59	16.06'	LT

ITEM 594. **CURB REMOVED AND DISCARDED**

CURB RADIUS LESS THAN 100' TO BE R&D

MARION ROAD

STA	OFFSET		TO	STA	OFFSET	
9+37.82	22.20'	RT	-	9+49.64	27.91'	RT
9+79.55	26.17'	RT	-	9+89.87	20.62'	RT
14+51.92	21.59'	RT	-	14+73.75	31.79'	RT
14+77.65	35.38'	RT	-	14+81.94	58.37'	RT
15+19.02	32.54'	RT	-	15+19.02	56.37'	RT
15+67.65	30.09'	RT	-	15+84.60	39.72'	RT
18+46.77	22.72'	LT	-	18+77.48	56.31'	LT
19+05.92	58.80'	LT	-	19+45.13	23.06'	LT
20+34.88	29.81'	LT	-	20+48.21	53.75'	LT
20+70.64	53.85'	LT	-	20+88.45	28.66'	LT
25+53.45	29.68'	LT	-	25+55.07	26.98'	LT
29+11.69	22.63'	LT	-	29+35.89	47.69'	LT
29+66.52	45.47'	LT	-	29+75.52	30.96'	LT
29+79.39	27.77'	LT	-	29+91.06	23.72'	LT
31+75.59	24.77'	LT	-	31+90.84	30.35'	LT
31+94.37	33.87'	LT	-	32+00.99	59.44'	LT
32+18.20	55.99'	LT	-	32+24.87	32.33'	LT
32+28.66	28.95'	LT	-	32+42.17	25.03'	LT
32+32.85	32.00'	RT	-	32+36.73	56.84'	RT
32+15.75	23.87'	RT	-	32+28.79	28.20'	RT
32+72.96	57.34'	RT	-	32+74.01	31.63'	RT
33+39.21	31.65'	LT	-	33+56.80	64.87'	LT

ITEM 580. (Continued)

33+20.00	25.20'	LT		-		33+39.21	31.65'	LT
34+01.80	66.22'	LT		-		34+05.92	33.10'	LT
34+10.17	30.05'	LT		-		34+26.90	24.53'	LT
35+16.52	46.91'	RT		-		35+21.79	31.24'	RT
43+71.45	24.65'	RT		-		43+77.49	45.55'	RT

GIBBS AVE

STA	OFFSET			TO		STA	OFFSET	
150+29.04	29.98'	LT		-		150+97.08	12.81'	LT
150+97.25	12.09'	RT		-		150+32.54	37.91'	RT

ITEM 597. **EDGING REMOVED AND DISCARDED**SWIFTS BEACH ROAD

STA	OFFSET			TO		STA	OFFSET	
15+19.02	32.54'	RT		-		15+19.02	56.37'	RT

ITEM 630.2 **HIGHWAY GUARD REMOVED AND DISCARDED**MARION ROAD

STA	OFFSET			TO		STA	OFFSET	
27+35.60	26.21'	LT		-		28+33.12	27.20'	LT
27+36.62	30.24'	RT		-		27+88.72	30.60'	RT

ITEM 645.160 **60 INCH CHAIN LINK FENCE (PIPE TOP RAIL) VINYL COATED (LINE POST OPTION)**MARION ROAD

STA	OFFSET			TO		STA	OFFSET	
27+36.16	24.84'	LT		-		27+96.14	26.13'	LT
27+35.55	34.00'	RT		-		27+95.55	34.00'	RT

ITEM 665. CHAIN LINK FENCE REMOVED AND STACKED**MARION ROAD**

STA	OFFSET		TO	STA	OFFSET	
37+04.84	28.94'	LT	-	38+23.96	29.93'	LT
16+60.23	29.97'	RT	-	16+86.49	31.03'	RT
17+05.19	31.33'	RT	-	17+79.18	29.97'	RT

ITEM 669. FENCE REMOVED AND STACKED**MARION ROAD**

STA	OFFSET		TO	STA	OFFSET	
31+11.68	31.78'	RT	-	31+30.00	31.96'	RT

ITEM 710.4 BOUND - PLAIN GRANITE**MARION ROAD**

STA	OFFSET	
14+35.95	30.50'	LT
14+35.95	33.23'	LT
14+41.62	30.50'	LT
14+41.62	33.23'	LT
14+82.11	30.50'	LT
14+82.11	36.14'	LT
14+89.61	30.56'	LT
14+89.61	36.14'	LT
15+50.82	37.55'	LT
15+50.87	31.31'	LT
15+77.69	37.71'	LT
15+77.70	31.46'	LT
16+00.07	31.50'	LT
16+04.82	33.06	RT
16+09.58	36.12	RT

ITEM 710.4 (Continued)

16+18.05	31.00'	RT
17+82.47	31.50'	LT
18+50.11	31.21'	LT
18+72.70	45.74'	LT
19+13.37	44.97'	LT
19+31.11	30.49'	LT
20+90.34	31.00'	RT
21+18.49	29.51'	RT
33+12.83	30.46'	RT
33+14.01	34.00'	RT
33+19.48	33.95'	RT
33+21.38	30.46'	RT
34+24.74	30.60'	RT
34+26.45	32.40'	RT
34+32.25	32.41'	RT
34+32.25	30.61'	RT
36+96.24	30.72'	LT
37+44.04	29.16'	LT
38+05.62	30.00'	RT
38+16.10	30.00'	RT
39+35.95	30.00'	RT
40+96.44	30.00'	RT

ITEM 711. **BOUND REMOVED AND RESET****MARION ROAD**

STA
STA 37+05, LT
STA 40+96, RT

SWIFTS BEACH ROAD

STA 100+78, LT
STA 100+79, LT

ITEM 715. RURAL MAIL BOX REMOVED AND RESET**MARION ROAD**

STA	OFFSET
7+15	LT
8+10	RT
10+10	LT
10+15	LT
13+10	LT
14+40	RT
16+75	RT
17+05	RT
22+50	RT

ITEM 854.016 TEMPORARY PAVING MARKINGS - 6 INCH (PAINTED)

INSTALL TEMPORARY MARKINGS TO REPRODUCE CENTERLINES, EDGE LINES, CROSSWALKS, AND STOP LINES ON THE MILLED SURFACE AND INTERMEDIATE HMA COURSE AND FOR USE ON TEMPORARY TRAFFIC CONTROL STAGE 1 AND 2 TO DIRECT TRAFFIC OUT OF WORK ZONES.

ITEM 854.036 TEMPORARY PAVING MARKINGS - 6 INCH (TAPE)

FOR TEMPORARY SINGLE YELLOW CENTERLINE MARKINGS ON SURFACE COURSE (4' LINE EVERY 40') UNTIL THE PERMANENT MARKINGS ARE APPLIED.

ITEM 854.1 PAVEMENT MARKING REMOVAL

TO REMOVE THE EXISTING PAVEMENT MARKING TO DIRECT TRAFFIC OUT OF WORK ZONES IN TEMPORARY TRAFFIC CONTROL STAGE 1 AND 2 OR ELSEWHERE DIRECTED BY THE ENGINEER.

ITEM 874.21 FLASHING SCHOOL ZONE TRAFFIC SIGN REMOVED AND RESET

FROM SIGNING AND PAVEMENT MARKING PLANS

MARION ROAD

<u>STATION</u>
42+40, RT

ITEM 903. **3000 PSI, 1.5 INCH, 470 CEMENT CONCRETE**

FOR USE ON LOCATIONS WHERE HYDRANTS ARE REMOVED AND RESET FOR
THRUST BLOCKS.

ITEM 904. **4000 PSI, 3/4 INCH, 610 CEMENT CONCRETE**

FOR REPAIR CEMENT CONCRETE STAIRS WITHIN THE PROJECT LIMITS.

*** END OF DOCUMENT ***

DOCUMENT A00804

WAREHAM FIRE DISTRICT

RULES & REGULATIONS

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**WAREHAM FIRE DISTRICT
PLANNING, MATERIAL AND CONSTRUCTION SPECIFICATIONS
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APPENDICES..... 35**1.0 PREFACE**

The intent of these rules is to provide customers, contractors, engineers, developers and others with a uniform set of regulations and standards by which any proposed or actual water work must adhere to these standards. These specifications may be amended from time to time at the discretion of the Board of Water Commissioners or their designee. Failure to know of, or conform to these specifications shall not be considered reason for deviation from these standards. It is the equal responsibility of the property owner and contractor to ensure proper compliance with the specifications as prescribed at the time of the work.

Property owners and contractors are encouraged to arrange for on-site pre-design and pre-construction meetings with the Superintendent or designee (Ph: 508-295-0450) to determine compliance with these specifications. Exceptions to these specifications may be granted if the deviation is in the benefit of the Wareham Fire District - Water Department (WFD), and upon written approval from the Board of Water Commissioners or their designee. Failure to comply with these rules may result in the termination of service. Any rule, regulation, or standard previously adopted by the Board of Water Commissioners or by the District not specifically addressed in these rules shall be enforceable as if it is part of these rules.

2.0 DEFINITIONS

Board or BoWC– Board of Water Commissioners

Certificate of Acceptance – Written verification from the Board of Water Commissioners or their designee, that all water system work is complete and without any outstanding deficiencies. Certificates of acceptance shall be issued by no sooner than one year after substantial completion of the work as determined by the WFD, and only if all deficiencies have been corrected.

Curb Stop Fee – A minimum fee charged to all inactive accounts as provided for in the rate schedule. A curb stop fee shall apply only to those accounts which 1) the water meter has been physically removed and returned to the Water Department, and 2) the curb stop is shut off. Inactive accounts that do not meet both conditions shall be charged the minimum fee even if shut off at the curb stop. The curb stop fee shall be charge twice annually to each account of record until such time the service is physically removed from the water system at the corporation stop.

Development Fees – A system development fee shall be paid for each new connection to either an existing main or a new service. The fee shall be paid prior to the connection being made by each new water taker. The development fee shall be based on tap size as listed in the rate schedule at the time service is required.

Dig Safe - Dig Safe® is a not-for-profit clearinghouse that notifies participating utility companies of your plans to dig. In turn, these utilities (or their contract locating companies) respond to mark out the location of their underground facilities. Dig Safe is a free service, funded entirely by its member utility companies and can be found at <http://www.digsafe.com/> or by calling 811. Note:

1. Dig Safe does not mark utility lines. Participating utilities mark out utility locations.
2. WFD is not part of Dig Safe. All mark out requests must be made separately to WFD.

District – The Town of Wareham, Massachusetts less the area served by the Onset Fire District.

Engineer - The Districts' Consulting Engineer or his designated representative.

Inspector - The WFD Superintendent or his designated representative.

Inspection Service Fee – Three percent (3%) of the calculated total worth of the improvement to be paid prior to the commencement of work or time spent on site by WFD personnel at the current labor rates, whichever is greater.

Lateral or Non-Metered Connection – A water connection to any and all detached residential dwellings or commercial buildings after a meter. Each building serviced off a single meter shall be counted as a lateral connection and charged as prescribed in the rate schedule. Lateral water usage shall be included in the metered service allowance per billing.

Lead Free - The District only accepts service material, fittings, and meters which are considered "lead free." Lead free is as defined in the latest laws and regulations promulgated as well as associated amendments by the United States Environmental Protection (e.g. Lead and Copper Rule, Lead Contamination and Control Act, PART 141- National Primary Drinking Water Regulations: Part I, etc.), or Massachusetts Department of Environmental Protection.

Fire Protection (District) – Includes only those fire hydrants owned by the WFD and which are located within the public right-of-way. The water department is responsible for the repair, replacement and maintenance of fire hydrants owned by the WFD.

Fire Protection (Private and Town) – Includes both sprinkler systems and hydrants that: (1) provides exclusive protection to public or private building or parcel; or (2) is located on private property. Each privately/Town owned sprinkler and hydrant shall pay an annual "readiness to serve" charge in lieu of usage as prescribed in the rate schedule. The WFD is not responsible for the repair, replacement or maintenance of any private hydrant or sprinkler service.

Minimum Fee – A fee as described in the rate schedule charged to all active and inactive service accounts that have a water meter installed, or that are charged a flat fee (i.e. permitted manufactured housing or non-domestic un-metered accounts). The minimum fee shall be charge twice annually to each account of record.

Outside Water Sale – Water purchased from the tap at the Water Office at 2550 Cranberry Highway or from a metered hydrant.

Private - The term private is used to denote features and items which are not owned or accepted by the WFD.

Retainage– A specified amount retained by the District as a non-interest-bearing receipt calculated as two percent of the total worth of the improvement payable on substantial completion. The minimum retainage held as security shall be not less than \$2,000.00. Said retainage shall be released only upon receipt of a written certificate of acceptance from the WFD.

Service Call – A service call is any customer initiated request for service. Service calls include but are not limited to, turn on/off, final readings, missed meter appointments, missed service appointments, relocating or reinstalling remote reading devices and meters, seasonal installations, inspections, and damaged meter replacements. A separate charge shall be established for scheduled and un-scheduled service calls. An un-scheduled service call is one where the service is provided on the day it is requested.

Specifications- Wareham Fire District Water Department Standard Specifications, Rules & Regulations as published and amended from time-to-time by the Board of Water Commissioners or their designee.

Standards - As a default position, the WFD uses American Water Works Association (AWWA) Standards and manuals of practice as the basis for products and practices. Where not specifically referenced here within, it should be understood these are the standards for materials and practices the WFD adheres to for day to day operation. The WFD also adheres to other industry standards common in the industry such as the Ductile Iron Research Association (DIPRA), National Sanitary Foundation (NSF), American National Standards Institute (ANSI) standards or as specifically reference here within. Where there is a conflict in one of these standards, the stricter standard will be adhered to for the product or practice.

Substantial Completion - The point in the work at which the WFD determines the installation is complete and all noted deficiencies as of that date have been corrected. Substantial completion does not constitute final approval or acceptance of the work for the release of retained funds held by the District.

Superintendent - The Water Superintendent of the Wareham Fire District Water Department.

Warranty Deposit - Funds held for addressing improper road cut trench and subsequent repairs. If road cut is within the paved area of the road, a \$1,000 deposit will be held for 365 days. If road cut is within shoulder of the road, a \$500 deposit will be held for 180 days. A request at the end of the time period must be made to WFD to release funds. At this time the WFD will inspect the road cut and if found satisfactory will refund the deposit. If the road cut is unsatisfactory, the contractor shall make the necessary repairs. If the contractor refuses to make the necessary repairs, the deposit will be used to make necessary repairs. Any remaining deposit after repairs will be provided back to owner.

Water - Potable water produced and supplied by the WFD.

Water Department or WFD - The Wareham Fire District Water Department, (WFD)

Water System (System) - Any pipe, valve, meter, fixture, facility, apparatus, or appendage that is in any way associated with the production, storage, transmission, and/or use of municipal water. The water system also can be referred to as the treatment and distribution system.

Work - The furnishing of materials, equipment, labor, and all incidentals necessary for adherence to these specifications.

3.0 GENERAL NOTES

Contractors should contact the Superintendent or designee at (508) 295-0450 for a pre-construction meeting, and an estimate of inspection charges, warranty charges, retainage charges, or any other charges, at least ten business days before the scheduled start of work.

Phased installation of water mains shall not be permitted in any new development unless specifically approved by the BoWC. The District reserves the right to retain water related securities until such time the installation, testing, and final inspection of all work is complete and deficiencies corrected for a period of one year after substantial completion.

Department personnel shall inspect water system improvements during the installation. The contractor is responsible for notifying the WFD five days before any work is to take place. WFD inspectors must be on site for the following:

1. Test pits, taps, tie-ins, or the installation of mains, hydrants and services.
2. When crossing any culvert, drainage pipe, stream or obstacle requiring a change in pipe material, direction, elevation, or as deemed necessary by the Superintendent.
3. Flushing, pressure testing disinfecting operations, dechlorination, and acceptance sampling 24 hours and 48 hours after dechlorination.

The Superintendent shall issue a Notice of Completion to the contractor when the improvements reach the point of substantial completion and all fees due to the WFD are paid in full. A Notice of Completion provided to the contractor does not relieve the property owner from correcting items identified as deficient during later inspections. WFD policy requires additional inspections of system improvements until the improvement is fully accepted. The WFD shall note each deficiency and may retain water related securities until the deficiencies are corrected. Property owners are encouraged to coordinate with the Superintendent before making a request for refunding securities to avoid delays in the release of securities.

Only licensed persons in the employment of the WFD shall operate any gate valve, hydrant, or curbstop on any main or service for turning water on or off.

No water shall be sold or taken from any hydrant, blowoff, corporation, or curbstop for any construction, paving, dust control, or hydro-seeding, or any other purposes without the permission of the Superintendent. All non-account water sold shall be through a meter and backflow owned and supplied by the WFD. The

charge for water sold shall be at current water rates. Any unauthorized use of water shall be reported by the WFD to the police for prosecution.

4.0 WATER MAIN MATERIALS

All water main materials used within the WFD system shall conform to ANSI/AWWA standards, and where applicable, have National Sanitary Foundation approval. All material must be installed as to have no leakage under 150 pounds hydrostatic pressure. In general, the WFD has standardized on lead-free materials and ductile iron for pipe and fittings. Cast iron fittings shall not be accepted.

PIPE: All water main pipe shall be buried at a depth of no less than 4.5 feet and not more than 6 feet deep and conform to one of the following standards:

a) District owned water mains

- i. Class 52 (or better) or pressure class 350 North American made cement lined ductile iron pipe. Pipes will be manufactured by McWane Ductile, US Pipe, American Pipe, or approved equal.
- ii. Pipe shall meet the latest revision of the following standards:

ANSI/AWWA	C104/A21.4	Cement - Mortar Linings
ANSI/AWWA	C105-A21.5	Polyethylene Encasement for Ductile Iron Pipe
ANSI/AWWA	C110/ A21.10	Ductile-Iron and Grey-Iron Fittings, 3 Inch Through 48 Inch for Water
ANSI/AWWA	C111/A21.11	Rubber - Gasket Joints
ANSI/AWWA	C115/A21.15	Flanged Pipe
ANSI/AWWA	C150/A21.50	Design
ANSI/AWWA	C151/A21.51	Water Pipe
ANSI/AWWA	C153/A21.53	Fittings - Ductile Iron
ANSI/AWWA	C600	Installation

- iii. All products shall be constructed of ductile iron. Cast iron products are only acceptable if written permission is provided by the WFD.

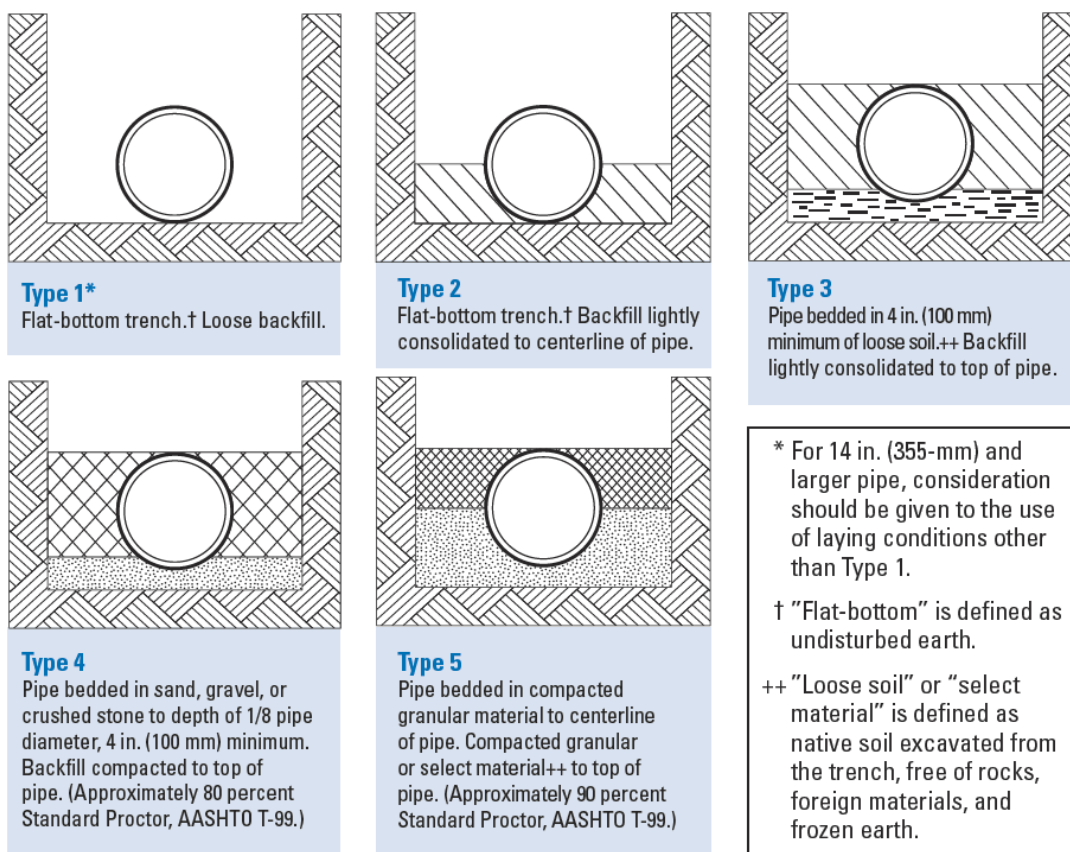
b) Private owned mains - Beyond District owned gate valves:

- i. Material listed in paragraph a) above or
- ii. C-900 DR-14 PVC (Permitted only beyond District owned gate valves)
 - i. Where organic contaminants exist (e.g. petroleum) in the soil that are not compatible providing safe water with PVC pipe, PVC pipe shall not be used. In such situations only ductile iron pipe shall be acceptable.
- iii. Fittings shall be ductile iron.

c) Pipe Laying Conditions: Pipe laying conditions shall be Type 5 (Table 1).

Table 1: Pipe Laying Conditions (Source: McWane Ductile)

LAYING CONDITIONS



Notes:

Consideration of the pipe-zone embedment conditions included in this figure may be influenced by factors other than pipe strength. For additional information on pipe bedding and backfill, see ANSI/AWWA C600.

American Association of State Highway and Transportation Officials, 444 N. Capitol St. N.W., Suite 225, Washington, DC 20001.

- d) **Minimum Size:** The sizing of water mains shall be based on sound engineering principals. All water mains shall be minimum 8-inch nominal diameter. All hydrant connections shall be minimum 6-inch diameter.
- e) **Minimum Length:** Pipe length for water mains shall be no less than 18 feet.
- f) **Pipe Protection from Corrosion:** Where there is possible excessive corrosion due to corrosive soil conditions, a polyethylene encasement for ductile iron pipe shall be implemented per ANSI/AWWA C105/A21.5 or ASTM A674. Soil corrosivity testing shall be performed by a N.A.C.E. International certified personnel. All contractors installing pipe are required to perform this test and provide the results to the WFD.
- g) **Restraining System:** All pipes shall be restrained. Restraints shall be provided by Sure Stop 350 gaskets for sizes 3 inch to 24 inches in diameter and TR Flex over 24 inches in diameter or equal by approved manufacturers (Field Lok 350, Fast grip). Where soil is believed to provide the necessary friction for restraint, permission shall be obtained by the WFD in writing and calculations by certified by a professional engineer in the state of

Massachusetts shall be provided. Thrust blocks or mechanical joint restraints can be provided as described below are acceptable alternatives where appropriate.

- h) **Water Body Crossing:** When it is necessary to cross a body of water requiring only a small deflection in the joints, restrained standard push-on or mechanical joint pipe can be used. If the water is deep and the angle of deflection in the joint necessary to follow the contour of the riverbed is great, ball and socket pipe—with a deflection up to 15 degrees should be used. A combination of restrained and ball and socket joints shall be used.
- i) **Gaskets:** Gaskets shall be used for appropriate application and contaminants present and meet AWWA standards. Nitrile gaskets shall be used where petroleum contamination exists. Manufacture recommended joint lubricants shall be used during assembly.
- j) **Electrical Grounding:** No electrical grounds shall be made on water pipes, water services, fitting, water meters, or any other appurtenance. Electrical grounding shall be provided in accordance with the Massachusetts Electric Code.
- k) **Looping:** Dead ends shall be minimized by looping of all mains when practical, from one part of the system to another. When dead end mains are allowed by WFD in writing, they shall be equipped with the means to provide adequate flushing which will give a velocity of 3.0 feet per second or greater in the main being flushed or provided with an automatic flushing unit at the discretion of the WFD. The WFD may also require a meter pit and meter associated with the automatic flushing unit.

PIPE FITTINGS: All pipe fittings shall be mechanical joint ductile iron class 350 conforming to AWWA standard C-153 and constructed of ductile iron. All mechanical joints shall be secured with a restraint as defined below.

Similar to pipe, the fitting shall be wrapped in polyethylene if the soil conditions are found to be corrosive.

MECHANICAL JOINT RESTRAINTS: Retaining glands shall be provided wherever any water pipe is inserted into any valve, hydrant, or fitting, unless approved by WFD to do otherwise. Due to the varied pressures found in the system, the use of non-restraint type mechanical joint glands for the purpose of inserting pipe into any valve, hydrant or fitting is not authorized and will require replacement if used. The use of thrust blocking in addition to mechanical restraints is at the discretion of the contractor. The following retaining devices are approved for fittings, hydrants, and valves:

- a. Mega-Lug® restraints
- b. GripRing® restraints
- c. or approved equal.

VALVES: All gate, hydrant, and tapping valves shall open left and conform to AWWA Standard C-509 for resilient wedge valves constructed of ductile iron. The distance from the top of the valve nut to final grade should be no greater than six (6) feet. Valves buried greater than six (6) feet below final grade require an extension on the valve nut. Valves shall be operated through a 5¼ valve box. AWWA C515 - Standard for Reduced-Wall Resilient Seated Gate Valves for Water Supply Service shall only be acceptable if provided in writing by the WFD. Gate valves shall be constructed of ductile iron.

TAPPING SLEEVES: Tapping sleeves shall be full circumference shell and seal 316 stainless steel. Please note that for existing asbestos cement pipe that exists in the distribution system, contractors should determine the pipe Outside Diameter (OD) by test pitting before ordering the sleeve. Sleeves that do not properly fit the OD will be rejected.

AIR RELEASE VALVES: Air release valves are not permitted for use in the WFD system unless specifically approved in writing by WFD.

TESTING AND BLOWOFF ASSEMBLIES: Blowoff assemblies for air purging, pressure testing, and disinfection shall be temporary installations. The WFD requires a one (1) inch assembly consisting only of a tapping saddle, one-inch corporation, and HDPE tubing. Ten feet of tubing should remain above grade for pressure testing and disinfection purposes. Assemblies should be installed as close to the main line tap as possible, yet be safely out of the travel way. Consideration should be given to the need to re-excavate the corporation once testing is complete. Upon successful completion of required testing, the tubing will be removed from the corporation, and the corporation closed at the saddle. Hydrants located "in-line" at the end of any main may be used for flushing instead of a blowoff assembly.

FIRE HYDRANTS: All fire hydrants shall meet AWWA C502: Standards for Dry-Barrel Fire Hydrants. Hydrants shall be 5¼-inch diameter open left valve Mueller Super Centurion traffic model hydrants. All hydrants shall have a gate valve attached to an anchoring tee. Hydrants shall be painted in accordance with WFD color scheme. Steamer port shall be painted as to indicate main line diameter. The steamer port invert shall be 18 inches above final grade. Barrel risers will be installed as required.

VALVE BOXES: All gate and hydrant valves shall be operated through a North American made water valve box. The box shall consist of a cover marked "water", a bell or flared base, and a 5¼-inch diameter top flanged sliding top. The valve box shall measure the length from the valve body to the finished grade plus six (6) inches. All valve nuts shall be centered and plumb in the box at a depth of between four and one half (4 ½) and six (6) feet below final grade. Valves buried greater than six (6) feet below final grade will require a centering extension rod drilled and tapped onto the valve nut.

VALVE BOX EXTENSIONS: Valve boxes may be brought to final grade utilizing 5¼ by 12 inch valve box flanged extensions. Pioneer style extensions are not acceptable for this application.

COUPLINGS: Couplings used in the installation, joining, or repair of water main pipe shall be "Dresser" style constructed of ductile iron. All couplings will be of the same nominal diameter as the pipe. Gaskets and end rings shall be sized to compensate for variations in pipe OD and materials.

PIPE REPAIR CLAMPS: Leaks along the longitudinal length of a pipe may be repaired in place using clamps. Repair clamps shall be full circumference shell and seal 316 stainless steel sized to properly fit the OD of the pipe being repaired.

BELL JOINT LEAK CLAMPS: Leaks from pipe bell joints may be repaired in place using joint clamps properly sized for the pipe.

5.0 WATER SERVICE MATERIALS

Water services shall be either one (1) or two (2) inch taps. All connections shall be compression type fittings with stainless steel inserts; flared fittings are not permitted. All material must be installed as to have no leakage under pressure. Water services shall be sized in accordance with AWWA M-22. The use of polyethylene pipe and tubing shall be used for water services 2 inches in diameter and smaller. Water services that are larger than 2-inches in diameter shall use cement lined ductile iron water pipe. The WFD has standardized on lead-free service connections manufactured by either Mueller or Ford.

No electrical grounds shall be made on water service pipes. Electrical grounding shall be provided in accordance with the Massachusetts Electric Code.

RESIDENTIAL METERS: Residential meters shall be 5/8" x 3/4" electromagnetic type capable of providing 25 gallons per minute maximum flow with an accuracy rating of >98.5 percent. Check with WFD on current makes and models accepted by the WFD. Meters, regardless of size, shall only be purchased from the WFD. All meters shall remain the sole property of the District. Requests for a meter larger than 5/8" x 3/4" will require the submission of a fixture analysis prepared in accordance with AWWA M-22 standards and Massachusetts Statutes and Regulations.

INDUSTRIAL/COMMERCIAL METERS: Industrial/commercial meters are 1 inch or greater in size and purchased through the WFD and installed by WFD or a licensed plumber. Check with WFD on current model(s).

The WFD shall inspect the installation before final approval.

SERVICE SADDLES: All water services shall be saddled. No direct service or blowoff taps are permitted. Saddles shall be CC threads with double anodized steel bands, and high strength ductile iron body sized to properly fit DI, PVC or AC pipe. Zinc caps shall be provided to protect steel bands.

WATER SERVICE TUBING: All water service tubing shall be Copper Tube Size (CTS) Polyethylene (HDPE) tubing with a working pressure of no less than 200 PSI, conforming to AWWA C-901. Tracing wire on plastic tubing is required for locating the pipe. Tracing wire shall be 12 gauge wire or thicker.

CORPORATION STOP: Corporation stops shall be an open left Mueller style compression ball stops with a tapered CC thread and a compression pack joint (CPPJ) for CTS tubing conforming to AWWA C-800 standards. Corporation stop shall be manufactured by Mueller or approved equal.

STAINLESS STEEL INSERTS: Stainless steel inserts shall be compatible for use with 200 psi CTS HDPE flexible water service tubing and shall be used with all compression fittings.

CURB STOP: Curb stops shall be open left ball valve with Mueller style compression type pack joints (CCPJ) on both ends, and shall be compatible for use with CTS HDPE tubing. Curb stop shall be manufactured by Mueller or approved equal.

THREE PART UNION: This service fitting has a Mueller style compression type pack joints (CCPJ) on both ends and is compatible for use with CTS HDPE tubing.

MALE and FEMALE CPPJ X IP ADAPTERS: Adapters are to be used with CTS HDPE tubing having a Mueller style compression type pack joint on one end, and iron pipe thread on the other.

CURB BOX: All water service boxes shall be North American made "Buffalo" Style 2½ inch to include cover, slide top and base. The curb box shall measure the length from the curb stop to the finished grade plus six (6) inches. All curb stops shall be centered and plumb in the box at a depth of between four and one half (4 ½) and six (6) feet below final grade.

BACKFLOW DEVICES: A backflow device shall protect all services. A Watts #7 dual check valve shall protect residential services. A pressure vacuum breaker, reduced pressure zone device, or a testable double check valve shall independently protect irrigation systems. A device as specified by the WFD consistent with the hazard potential shall protect commercial and industrial services. A testable double check valve or reduced pressure zone device shall protect fire protection systems as specified by the WFD.

6.0 WATER SERVICE APPLICATION PROCEDURE

APPLICATION – The property owner or their designated representative shall complete a Water Service Application Card upon which the property owner or their designated representative shall receive a copy of the "RESIDENTIAL WATER SERVICE APPLICATION RULES". Applications are available at the Water Department. The system development fee shall be paid at the time the application is made. Building permit signoffs require completion of a Water Service Application Card. Note: Filing the application activates the account for billing.

Filing of Water Service Application shall include payment of all fees due and if deemed necessary shall include the cost for running a hydraulic model by the WFD engineer. Applications should be submitted ten (10) business days before the installation of the service. Application fees include a 5/8th inch meter and initial turn

on fee. Tapping fees are additional¹. Meters larger than 5/8th - inch shall be paid for in whole by the applicant. All meters regardless of size shall be purchased from the WFD.

SCHEDULING SERVICE TAP

Upon application, the owner/contractor can schedule the tap with the Operations Manager, (580) 295-0450. A pre-installation site visit is required. Owner is responsible for road cut, trenching, backfill, road repair, and traffic control within the right-of-way. Installers must be on WFD's approved contractor list which can be obtained from the District front office. Meter pits may be required depending on site conditions as determined by the WFD. On water services that are greater than 200 feet in length, the owner will be required to purchase and install a meter pit. The meter pit shall be as close to the road as possible and at the direction and approval of WFD.

Owner shall obtain all permits for the road cut, including:

1. Dig safe number
2. Wareham Municipal Maintenance Excavation Permit, which can be obtained for applicant by WFD
3. State Department of Transportation trenching permit (State Roads Only)

SERVICE LINE INSPECTION FROM CURB STOP TO FOUNDATION- Only licensed master plumbers or drain layers are permitted to install water service lines. Installers must be on WFD's approved contractor list which can be obtained from the District front office. Inspections shall be scheduled with the water department at 508 295-0450. Inspections must be scheduled before 2:00 PM on the workday before the actual installation. There is no charge for scheduled inspections. Requests for same day inspections require a \$70.00 service fee.

Inspections must be done before backfilling the trench. Backfill shall be suitable material free of debris and stones greater than 4-inch in size. Inspection on backfilled lines requires a pressure test. A valve must be installed on the service line inside the foundation for the inspection to be performed. Owner shall be responsible for all costs associated with installing the service line from curb stop to meter.

Service lines shall be installed in Type 3 laying conditions (See Table 1).

METER INSTALLATION - The meter setup and backflow device must be installed according to WFD specifications before the meter can be set. Water meters shall be installed and water turned on only by water department personnel. Meter appointments shall be scheduled with the water department at (508) 295-0450. Meter installations must be scheduled before 2:00 PM on the workday before the actual installation. There is no charge for scheduled appointments. Requests for same day installations require a \$70.00 service fee.

7.0 PLANS

SINGLE SERVICES - Plans for a single residential service shall be required. The proposed location of the water service shall be shown on plan in relation to the dwelling and roadway. The precise location of the water service may be altered in the field with the concurrence of the WFD. A detail plan may be required for installations >150 feet in length, that cross wet or wooded lots, are within 10 feet of a septic system, require a meter pit, or where a plan would benefit the WFD. No water service will be permitted to any building connected to a well and obtain water service from the well. Buildings on properties with wells may be serviced provided there is no physical connection between the well and the plumbing serviced by District

¹ Tapping charge (if required) pays only for the equipment, material and labor for the water main tap to curbstop. No excavation or road repair work is included. Chargeable items include; tapping/boring machine, vehicles /equipment, corporation stop, PVC tubing; curb stop, 2 ½ inch curb box, and hours of total labor. Road boring costs for cross road services shall be additional. All additional material and labor costs incurred by the District because of owner or contractor inefficiency, delay, cancellations, or site conditions shall be charged to the owner. Police details, Town of Wareham Road opening permit (e.g. excavation permit), and all other permits required shall be paid for by the owner.

water. If deemed necessary, the WFD may require a water model be run by the WFD's engineering to confirm water availability and pressure. Cost for this model shall be covered by the owner.

WATER MAINS - Requests for water mains must be pre-approved by the BoWC. The minimum main for sub-division greater than ten units shall be eight (8)-inch. Sub-divisions of less than ten units may install a six (6)-inch pipe if adequate fire flow is documented by hydraulic modeling by the WFD's engineer. The pre-approval of water mains requires the submission of plans prepared by a professional engineer. All plans shall contain the note: "Installation of all mains, valves, hydrants and services shall be in accordance with the latest published WFD Specifications and Rate Schedules". The WFD requires the submission of the following plans for approval.

1. **WATER MODEL PLANS** – Water availability models are required for all developments, unless chosen by WFD to do otherwise. Two (2) copies of modeling plans shall be provided directly to the Superintendent during the planning phase of the development. Modeling plans are conceptual in nature used to determine the District's ability to provide adequate fire flow (750 gpm or better) while maintaining residual system pressure (25 psi) under peak demand conditions. Modeling plans shall be prepared on **one (1) sheet** and contain both a plan and profile view of the proposed extension. The plan view shall include lot lines, and the pipe layout. The profile view shall show pipe depth in relation to existing and final grades. Both the plan and profile views shall depict stations at 100 foot intervals. Plans should be clearly delineate water assets. Plans, which contain excessive topographical, drainage, landscaping, roadway, or other non-water, related notes, details or drawings, will be rejected without review. A data block shall include sub-division name, developer and engineer contacts, lot numbers, average lot and dwelling sizes, type of development, connecting and proposed street names, pipe size and type and other necessary information.
2. **TECHNICAL REVIEW PLANS** - The technical review (TR) plan shall be similar to the model plan only in greater detail and without the profile view. TR plans shall indicate the general layout of the water improvements in relation to other underground utilities and lots. In place of the profile view will be the notes and details necessary for the Superintendent to review the plan. TR plans should be prepared on **one (1) sheet**. TR plans, which contain excessive topographical, landscaping or other non-water related notes, details or drawings, will be rejected without review. Two copies of the TR plan will be supplied directly to the WFD.
3. **FIELD PLANS** - Field plans are the TR plans except they contain the revisions noted during the review process. Field plans are used by the WFD during pre-construction and construction activities for planning and inspection purposes. Construction plans are not acceptable for use as field plans. During pre-construction and construction activities, the Superintendent may agree to, or require, minor modifications to the field plan if the revision benefits the District. Field plans shall be prepared on **one (1) sheet** and contain no non-water related information. Two copies of the field plan will be supplied directly to the WFD before the pre-construction site meeting.
4. **AS BUILT PLANS** - As-Built plans shall be submitted to the District upon completion of the work. As-built plans shall accurately reflect the installation of the water main. As-built plans shall be clearly marked as such. As-built plans will be used in retainage reduction inspections of the completed work. Submission of as-built plans to the WFD is required before the release of any water related securities held by the District. As built plans shall be similar to field plans, but include the measurements, swing ties, depths and other information relating to the installation. As-built plans shall be prepared and stamped by a professional engineer or land surveyor in accordance with the requirements of the Superintendent.

8.0 INSPECTIONS, TESTS, PERMITS, AND RECORDS

Contractor shall coordinate with the Superintendent for inspections and the calculation of the inspection services fee. The contractor shall arrange and pay for all required tests. WFD must be present on-site at the initiation of the test for it to be validated by the Superintendent. The contractor is responsible for obtaining and having on site, excavation permits to include Digsafe, Wareham Municipal Maintenance Department or

Mass DOT excavation road cut permits. No water work shall take place without the proper permits and or details in place. The property owner is responsible for keeping accurate records to produce "as-built" plans. Any fees required for obtaining permits are the responsibility of the contractor.

Inspection services provided by the WFD do not guarantee the quality of workmanship or the functionality of the improvement at the time of installation or thereafter. Inspections provided by the WFD are to determine that materials used and the installation procedure complies with these specifications. No District approval of the work, design, materials or installation is expressed or implied with an inspection.

9.0 EXCAVATIONS

Excavations shall follow all local, State, and Federal safety regulations. The following are specific rules and requirements for excavations within the WFD. Where there is a conflict here with the Wareham Municipal Maintenance Department rules and regulations for road, the guidelines from the Wareham Municipal Maintenance Department rules and regulations shall apply over the Water Department rules and regulations for road repairs.

- a) Excavation Permits
 - 1. Excavation permits obtained by the WFD on behalf of another party shall require the posting of a cash deposit of \$500.00 for unimproved roadway or shoulder excavations, and \$1,000.00 for improved or paved road excavations. The deposit shall be retained without interest until a release of the permit is granted from the Town. Deposits are released upon written request and release.
- b) No excavation shall remain open after working hours (7:30 a.m. to 4:00 p.m.) unless provided in writing by the WFD. All excavations shall be backfilled and paved, or covered with steel plates as approved by DPW at the end of work each day. During working hours, open excavations shall be attended to help prevent falls in unauthorized access.
- c) The maximum length of open trench permissible at any time shall be two hundred (200) feet, and no greater length shall be opened for pavement removal excavation, construction, backfilling, repairing, or any other operation without the express written permission of the WFD.
- d) Excavations across Town or State roadways will require the utilization of "trenchless technology" and/or the use of a "flowable fill" type material as discussed below. Deviations from this will be required in writing from the WFD.
- e) Workmanship:
 - 1. The Contractor shall furnish all materials and conduct the job in an orderly, timely, quality-controlled manner.
 - 2. The Contractor shall keep a competent foreman and sufficient competent employees to carry on the work with proper speed and in accordance with the requirements of law and other public authorities and to the reasonable satisfaction of the WFD
 - 3. The Contractor shall conduct the work in a manner that will not unreasonably interfere with other work being done by the Town or WFD, by contract or otherwise. If deemed necessary by the WFD, the work done under these standards shall conform to the progress of said other work. The Contractor shall cooperate with the contractors or employees who may be doing work for the Town or WFD, and with public service corporations affected by the work in arranging for storage places, temporary support for structures, repairs, etc.
 - 4. All temporary repairs shall be properly maintained by the Contractor to assure good rideability conditions until the end of the guarantee period or until permanent restoration has been made, whichever first occurs.
 - 5. Permanent pavement restoration accomplished by utility companies shall be properly maintained to assure good rideability conditions until acceptance by the WFD and Town.
- f) Removal of asphalt pavement:

1. All initial excavations into paved street surfaces shall be precut in a neat line with pavement breakers or saws.
 2. Saw cutting is the preferred method for work done for the WFD. The use of hydro-hammers or heavy-duty pavement breakers for breaking pavement are limited on all streets unless written permission is granted by the WFD for their use after due consideration of the location, the condition of the street, and the depth of saw cutting required ahead of the use of the hammers.
 3. No irregular pavement cut shapes will be allowed. No shape will be allowed that would prevent compaction equipment from adequately compacting all of the area.
 4. The shape of pavement cutouts shall be rectangular, or a combination of rectangular and square shapes unless otherwise agreed to by the WFD and Contractor.
 5. Pavement edges shall be trimmed to a neat vertical face free of loose materials and neatly aligned with the centerline of the trench.
 6. Unstable pavement shall be removed over cave outs and overbreaks and the subgrade shall be treated as the main trench.
 7. The Contractor shall make every effort to avoid damage to existing pavement to remain. Any damage shall be promptly repaired by the Contractor.
- g) Removal of concrete pavement:
1. Sawcutting of reinforced Portland cement concrete is required with the depth of the cut being the full depth of the pavement unless otherwise directed by the WFD to retain reinforcement.
 2. Sawcutting may be required by the WFD outside of the limits of the excavation over cave-outs, overbreaks and small floating sections.
 3. Reinforced concrete pavement, to the extent possible, shall be removed without cutting the reinforcement. The bars or mesh, when cut, shall be severed as close to the center of the trench as practicable and bent back to permit accomplishment of the work. When the pavement is ready to be permanently replaced, the reinforcement shall be bent back into position and reinforced with other bars or mesh which shall overlap the ends of existing reinforcement not less than twelve (12) inches and be securely wired together.
 4. Contact faces between new and existing concrete pavement shall be bonded using an approved epoxy binding agent installed and applied in accordance with the manufacturer's instructions, unless otherwise directed by the WFD.
- h) All material excavated from trenches and piled adjacent to the trench or in any street shall be piled and maintained in a manner that will not endanger those working in the trench, pedestrians or users of the streets, and so that as little inconvenience and obstruction as possible is caused to those using streets and adjoining property. The excavated material shall be hauled away from the site by the end of each working day.
- i) The Contractor shall secure the necessary permission and make all necessary arrangements for all required storage and disposal sites.
- j) When excavated material is laid along the side of the trench, it shall be kept trimmed. Whenever necessary in order to expedite the flow of traffic or to abate the dirt or dust nuisance, toe boards or bins may be required by the WFD to prevent the spreading of dirt into traffic lanes. If any portion of the excavated material is allowed to be used as backfill, it shall be stockpiled separately from all other materials.
- k) Sections of sidewalks and curbs shall be removed to the nearest real joint or scoreline.
- l) Tunneling, boring or other methods may be required by the WFD to avoid or minimize pavement removal.
- m) Special Condition(s)
1. Traffic Management Plan

- i. The Contractor shall prepare, and submit to the WFD, a plan that shows the routing of traffic during construction. The plan shall show the area and dimensions of the roadway pavement available for traffic during each stage of the work. The plan shall include all temporary barriers, signs, pavement markings, drums and other traffic control devices required to maintain traffic together with the limits of temporary pavement and necessary steel plates. The plan shall include all the requirements by the Town of Wareham Municipal Maintenance for road openings, or MassDOT requirements.
2. Steel Plates
 - i. Design Requirements:
 1. The Contractor shall select and design the temporary steel plate and supporting system. The design calculations and Drawings shall be prepared, signed, and stamped by a Professional Engineer registered in the Commonwealth of Massachusetts experienced in design of temporary traffic decking.
 2. Design shall be in accordance with Loads and Design Criteria standard to the industry for this type of work, and with the following requirements:
 - a. For vehicular ramps, limit maximum grade to 5 percent.
 - b. For pedestrian ramps, limit maximum grade to 8 percent.
 - c. Conform with Americans with Disabilities Act Accessibility Guidelines (ADAAG) at all pedestrian traffic locations.
 - d. Design of support members shall allow clearances for existing and relocated utilities.
 - e. Provide access to utilities, fire hydrants, and other facilities requiring unique access. Requirements at each site shall be obtained from the respective agencies affected.
 - f. Plates shall overlap the trench width by at least 2 feet on each side.
 - ii. Construction Methods:
 1. Install and maintain the temporary steel plate systems only with express WFD approval.
 2. Not more than two (2) steel plates shall be used at any time.
 3. Steel plates shall not be used between November 15 and April 15 or at any time when snow is forecasted.
 4. Place 48" x 48" orange and black construction sign, stating "Steel Plates 100 feet" to provide drivers with advanced notice.
 5. Provide wood wedges under plate edges at uneven surfaces to minimize movement.
 6. Provide temporary asphalt at the plate edges to provide lessen impact to vehicle traffic or trip hazard to pedestrian traffic and to assist in holder plate in place.
 - iii. Maintenance:
 1. Inspect the condition of temporary steel plates at least once a day. Continuously maintain plates to conform to design requirements and construction requirements. Immediately repair defects such as broken, bent, or loose plate members, and protruding fasteners. Patch adjacent paving as potholes develop, and immediately re-secure and bed loose transition members, plates, and ramps to the existing pavement.
 2. Maintain steel plates free of accumulations of snow, ice, water, mud, and debris.
 3. Perform maintenance, repair, or replacement whenever there is noticeable deterioration of any material or component from its original conditions

10.0 TRENCHING, BACKFILLING, and PAVING

The minimum depth of cover over the spring line, crown, or top of the pipe shall not be less than 4½ feet and no more than 6 feet at the time of installation. In such cases where 4½ feet of cover is not possible, the piping shall be appropriately insulated water pipe. Where there is a conflict here with the Wareham Municipal Maintenance Department rules and regulations for road repair (temporary and permanent), the guidelines from the Wareham Municipal Maintenance Department rules and regulations shall apply over the Water Department rules and regulations for road repairs.

The trench bottom and sidewalls shall be free of boulders, protruding ledge, stones larger than four inches, roots, trash, asphalt, debris or other unsuitable materials. Backfill shall likewise be free of boulders, ledge, stones larger than four inches, roots, trash, asphalt, debris, clay, fine sand or other unsuitable materials. Pipe laying shall be type 5 for water mains and type 3 for service lines (See Table 1).

The following are the rules and requirements for trenching, backfilling, and paving:

a) Trenching

1. Any trench or backfill that is unsuitable in the opinion of the WFD due to depth, stability, wetness or clay content shall be rejected for use.
2. Trench bottoms shall be at a uniform depth to grade at installation. Irregular trench bottoms may be made uniform using a bedding material six inches in depth. Bedding material shall meet the same standards as the backfill previously described. Pipes shall be installed only in dry trenches. All open ends of pipe shall be closed off to prevent water, dirt, animals, or other foreign substances from entering the pipe.

b) Backfill

1. Before backfilling, the Contractor shall notify the WFD for inspection. Backfilling shall not occur without WFD approval.
2. In unpaved areas, excavations shall be backfilled as directed by the WFD with approved material thoroughly compacted in layers not to exceed twelve inches (12 inches) in thickness until flush with the surrounding ground surface. If the backfilled material settles, additional approved materials shall be installed by the Contractor, as required, to keep the surface even. After settlement is completed, the excavated area shall be left by the Contractor in as good a condition as before the work was started.
3. Temporary sheeting and bracing used to support the side walls shall be removed, unless otherwise directed by the WFD, as backfilling progresses. When backfilling has reached the bottom of a brace, the latter and its horizontal rafter shall be removed, and this procedure shall be repeated throughout the backfilling operation. The sheeting shall be pulled in short increments, care being taken to avoid significant lateral movements of the sides of the trench. During and after pulling the sheeting, the backfill in the space formerly occupied by the sheeting shall be compacted.
4. Whenever water is found standing in the excavation area, the water shall be removed by pump or other means before backfilling operations may commence.
5. Backfilling shall be performed as soon as practicable so that the least possible subsequent settling will occur. In most cases backfilling shall occur on the same day as the excavation was begun. If this is not feasible due to the complex nature of work, emergency, or unpreventable conditions, the Contractor shall notify the WFD that same day, if not sooner, and take appropriate measures to protect public safety and infrastructure until work commences again the following day.
6. Backfill in paved areas shall be granular gravel borrow, processed gravel, sand or crushed stone material (dependant on the specific utility) placed to a depth of 1 foot over the utility. In paved areas, trenches shall be backfilled in 12-inch lifts. Each lift shall be thoroughly compacted by means of a vibratory or mechanical compactor before the next lift is laid in place. The backfill shall be placed up to the pavement subgrade surface.
7. Broken pavement, large stones, roots and other debris shall not be used in backfill. Unused excavated material shall be removed from the jobsite and disposed of in a manner that will

minimize interference and obstruction with pedestrian and vehicular traffic. No material shall be left within the right-of-way once the repair and/or installation is complete.

8. WFD may require the use of Excavatable Controlled Density Fill (CDF or Flowable Fill) during backfilling. Within the limits of the pavement, the trench shall be backfilled with Flowable Fill to an elevation of four (4) inches below the top of the paved surface. The following additional conditions must be met:
 - a. Only Type IE, Excavatable Fill will be allowed.
 - b. This material shall not be used for bedding material or in situations that will cause floating of the utility lines, or in the presence of cast iron or steel pipes.
 - c. CDF placement in trenches shall be fully barricaded or police protected for a minimum of three (3) hours after the pour or until a set is reached that will prevent a hazard to animals or humans.
 - d. CDF shall be separated from gas lines with a minimum of six (6) inches of sand cover over the lines.
 - e. Excavations that cross or extend into the public right-of-way shall be saw cut and backfilled with a "flowable fill" type material to grade and allowed to cure for at least 24 hours before the application of the binder coat. Contractor is responsible for maintaining at least one lane of traffic flow using road plates or barricades as well as meeting all State and Federal safety requirements.

c) Temporary Pavement

1. Upon the completion of proper backfilling, the Contractor shall install temporary pavement. The Contractor shall take all reasonable measures to complete temporary pavement on the same day excavation work was begun. If same day paving is not achievable due to complexity of work, emergency, or unpreventable conditions, the Contractor must notify the WFD as soon as practicable that same day, if not sooner, and take appropriate measures to protect the public safety and infrastructure until work commences again the following day. The most stringent measures will be required on primary streets. Same day paving will typically be required if work is not expected to be continued the next day, regardless of location.
2. The Contractor shall notify the WFD 24 hours prior to beginning paving operations for inspection. All hot mixed asphalt paving must first be approved by the WFD as to depth and materials; this applies to both temporary and permanent paving activities.
 - a. Notification of the anticipated timing of all paving activity must be acknowledged by the WFD. Any notification delivered by facsimile machine must be preceded or followed up by a telephone conversation to assure its proper and timely receipt.
 - b. Contractors shall endeavor to make a follow-up notification by 9:00 a.m. of each workday that paving is still anticipated. In the event of schedule changes or emergencies, the Contractor shall provide a minimum of one-hour notification to assure inspection availability.
 - c. If a WFD inspector is not able to be on site within 24 hours of the acknowledged anticipated start time of paving activity, the Contractor may be allowed to commence paving. Inspector may sample in-place material for specification compliance.
 - d. Contractors who do not provide proper notification of paving activities may be subject to required removal and replacement of pavement for the purpose of inspection.
3. All temporary pavement shall be hot mixed asphalt, conforming to MassDOT Standard Section 460, placed in one and a half (1.5) inch compacted courses to a total depth of three (3) inches. If a layer of concrete, cobblestone, granite pavers, or other supporting material also exists, the Contractor shall install concrete to match that depth prior to installing temporary pavement.
4. If excavation (or pavement damage) occurs at or within twenty four (24) inches of the edge of trench, the Contractor shall place temporary pavement to the edge of existing sound pavement.

5. Hot mixed asphalt paving of trenches deemed by the WFD to be major excavation shall be paver applied, unless otherwise authorized by the WFD.
6. The Contractor shall maintain the temporary pavement and shall keep the temporary pavement in acceptable condition until the end of the guarantee period, or until permanent pavement is installed. At this time, the temporary pavement shall be excavated to the required grade in order to place the permanent bituminous concrete pavement.
7. The Contractor shall perform any necessary restoration beyond the limits of the street pavement, including lawns, esplanades, shrubs, gardens, curbing, sidewalks, underdrains, separations fabrics, fences, walls, etc. if they have been damaged during their construction work. Upon completion of the permanent repairs outside the limits of the street pavement, the Contractor shall notify the WFD in writing that the permanent repairs and/or replacements have been completed, setting forth the date of completion. The Contractor shall maintain the repaired area outside of the pavement for a period of one (1) year after completion, with the exception that once proper horticultural growth has been established, no further horticultural maintenance will be required.
8. Refilling of bar holes made in the street or sidewalk shall immediately, upon completion of the work, be filled with compacted, granular material up to three (3) inches below the paved surface and the remaining three (3) inches filled with an approved asphalt plug.
9. All traffic control signs (i.e. STOP, YIELD, DO NOT ENTER, ONE WAY, NO PARKING, SPEED LIMIT, CURVE WARNINGS, etc.) approved by the WFD via the Municipal Maintenance Department for removal, relocation, replacement, etc. shall be immediately replaced by the Contractor, unless otherwise directed by the WFD. No such traffic control sign shall be removed, relocated or replaced without the express approval of the WFD.
10. All traffic devices, signs, pavement markings or traffic loops disturbed, damaged, altered or removed by the Contractor shall be promptly replaced by the Contractor, unless otherwise directed by the WFD, in accordance with Town and State of Massachusetts rules and regulations at the expense of the Contractor. The Contractor shall promptly repair all other damage caused by the work or activities. Street markings (centerlines, crosswalks, stop bars, lane markings, etc.) and traffic loops shall be replaced no later than thirty (30) days after completion of work or as may be directed by the WFD. If work disturbs centerlines or lane markings on primary streets, the Contractor shall place temporary reflective markers immediately after the pavement is placed.

d) Permanent Pavement

1. The existing pavement shall be sawcut a minimum of six (6) inches beyond the initial excavation limits to expose a six (6) inch width of undisturbed soil.
2. The temporary pavement, backfill and undisturbed soil shall be removed to the depth of the proposed pavement and disposed of off the site.
3. The permanent pavement shall be:
 - i. Binder coat shall be a minimum of three (3) inches in depth set in place as to accommodate a minimum of two (2) inches of finished topcoat. Finished asphalt shall be rolled to a flat uniform surface. The Wareham Municipal Maintenance Department shall issue a road cut permit which may include additional conditions or requirements.
 - ii. Binder shall be founded on 4 inches of Dense Graded Crushed Stone on 8 inches of Processed Gravel or Dense Graded Crushed Stone. This pavement structure shall be placed on the backfill.
 - iii. If pavement depth is greater than 5 inches, the Contractor will be required to match the existing pavement thickness. Increased depths of pavement may be considered on a case by case basis.
4. Trench backfill shall be checked for compliance with 95 percent compaction requirement. If compaction is found to be less than 95 percent, trench shall be re- compacted before paving will be allowed.

5. Permanent pavement restorations shall not be allowed to commence until at least one freeze/thaw season has passed since the installation of approved temporary hot-mixed asphalt pavement.
6. In cases where the existing pavement adjoining a proposed excavation is in need of rehabilitation, the WFD and Contractor may enter into a mutual agreement such that the Contractor undertakes the pavement rehabilitation as part of their pavement restoration.
7. Contractor will not be required to repair or replace damaged pavement existing prior to commencement of the work unless excavation operations result in small, unstable sections. These shall be removed and replaced as part of the work.
8. Each course of hot-mixed asphalt shall be compacted separately, meeting the requirement of 92 percent minimum compaction of standard laboratory theoretical maximum density for the specific material.
9. Mechanical compactors will be permitted for repairs less than 10 square yards. Repairs exceeding 10 square yards shall be rolled with an appropriately sized, power-driven, steel-wheeled roller to obtain specification density.
10. Hot-mixed asphalt materials shall be laid upon an approved clean, dry, compacted surface, spread and struck off to the established grade and elevation, giving regard to the loss in depth between loose and compacted mixtures. Immediately after the hot mix asphalt mixture has been spread, struck off, and surface irregularities adjusted, it shall be thoroughly and uniformly compacted.
11. All sawcut vertical faces of existing pavement shall be neat, free of loose materials, and tack coated with an approved asphalt emulsion by applying the emulsion material in conformance with MassDOT Standard Specifications Section 460.62, to fully cover the surfaces prior to pavement installation.
12. A tack coat shall be applied to the sub-base surface, or previous course surface.
13. If two or more excavations are made for the same utility or client in the same construction season and are within six (6) feet of each other, edge to edge, they shall be permanently restored as one trench, including the pavement between excavations.
 - i. Same requirement shall apply, if in a future season, an excavation for the same utility or client occurs within six (6) feet and the first has not yet been permanently restored.
14. If an excavation for the same utility or client falls within six (6) feet of another excavation already permanently restored, the permanent pavement of the second excavation shall include all surface pavement between both excavations.

e) Material Specification

1. Granular gravel borrow and processed gravel material backfill shall conform to MassDOT Spec. M1.03.0, Gravel Borrow Type (b) and MassDOT Spec. 1.03.1, respectively or as amended.
2. Sand borrow shall conform to MassDOT Spec. 1.04.0 or as amended.
3. Controlled Density Fill (CDF) Type IE Excavatable shall conform to MassDOT Spec. 4.08.0.
4. Pavement structure subbase material shall be either MassDOT M1.03.1 Processed Gravel for Subbase or MassDOT M2.01.7 Dense Graded Crushed Stone for Subbase. The material shall be spread in layers not exceeding eight (8) inches in loose depth and compacted to no less than 95 percent of the maximum dry density of the material, ASTM D1557.
5. Temporary pavement shall be hot-mixed asphalt MassDOT Type I top course material conforming to MassDOT M3.01.0 and M3.11.07.
6. Steel Plates.
 - i. Plates and supporting members shall be steel, either new or used.
 1. All materials shall be sound and free of damage or deterioration that would adversely affect functions.
 2. Load and deflection calculations shall be used on ASTM A36 / A36M steel unless Contractor provides evidence that all steel used for the plate systems will be a higher strength grade.

- ii. Steel plates in vehicular and pedestrian traffic areas shall be coated with an approved skid-resistant coating. Preparation of the surface and application of the coating shall be in accordance with all of the manufacturer's guidelines. Coatings shall be maintained on 100 percent of the surface of plates carrying vehicular and pedestrian traffic. Repairs shall be made to worn or deficient areas.
 - 7. Permanent pavement materials shall conform to the same MassDOT Standard Specifications as required for temporary pavement.
 - 8. Portland Cement Concrete shall conform to the requirements of Section M4 of the MassDOT Standard Specifications.
 - 9. Reinforcing shall be FIBERMESH fibers (100 percent virgin polypropylene, collated, fibrillated fibers) at a rate of 1.5 lbs. per cubic yard of concrete will be allowed for non-structural reinforcement. Installation shall be per manufacturer's recommendations.
 - 10. Loam shall conform to MassDOT Standard Specification Section 1.05, Loam Borrow. Loam shall have a finished depth of six (6) inches (minimum).
 - 11. Seeding shall conform to MassDOT Specification Section M6.03. Contractors shall be required to continually seed and water areas of loam until a satisfactory growth of grass is established.
 - 12. Filter fabric for underdrain shall be equivalent to Mirafi 140 by Fiber Industries.
- f) References
- 1. All materials and execution shall conform to the highest applicable standards. If there is a conflict between other standards and these Design standards, then the most stringent criteria shall be used.
 - 2. These standards draw and refer to the Commonwealth of Massachusetts Massachusetts Highway Department: Standard Specifications for Highways and Bridges (1995 et seq.) and the Commonwealth of Massachusetts - Massachusetts Highway Department: Construction and Traffic Standard Details (1996 et seq.). These two documents are referred to collectively as the MassDOT Standards. The latest revision of each standard shall be referenced.

11.0 PRESSURE, CHLORINATING, AND BACTERIA TESTING

Municipal Lines

Leakage Test: All pipelines shall be tested for leakage before the installation of service taps. Methods of testing and plans showing sections to be tested shall be submitted to the WFD for approval as requested. All pressure testing must be in conformance to a written plan submitted to, and approved by, the WFD.

No more than 2,000 feet of water main shall be tested in a single test. During this test all hydrant laterals shall be in the open position. The Contractor will not perform a pressure test against existing valves unless authorized by the WFD.

Contractors will retain the WFD to conduct acceptance tests as prescribed in the rate schedule utilizing the following procedure:

- 1. Pipes will be filled slowly with water through valves operated by the WFD.
- 2. Hydrostatic testing is performed as follows using the bump test (see Appendix A for descriptions and forms):
 - a. Internal pressure of the pipeline shall be gradually increased to a steady reading of the WFD choice (typically 50, 100, and 150-psi gage) on three separate tests.
 - b. After the initial 30 minute sit period, repump the line to 50 psig and measure the amount of the water pumped into the system.
 - c. Repeat the same 30-minute sit & recovery at 100 psi and 150 psi and record the results.
 - d. If the recovery volume at these increasing pressures, whether its ounces or gallons, stays the same or decreases, the pipeline is tight and is not leaking water but simply compressing a contained air bubble, which expands when the pumps cease.

- e. Increasing recovery volumes at increasing pressures is a clear statement that trapped air is not affecting the pressure reading but a leaking valve, a leaking joint, a defective item, or some other issue that must be further diagnosed or repaired / replaced.
- f. Any loss of pressure at this phase of the test requires the termination of the test until the leak is located and repaired.
- g. All visible leaks shall be corrected regardless of the results above.

All pipelines must pass the hydrostatic pressure test before initial flushing and the introduction of chlorine for disinfection.

The Contractor shall submit a written report to the WFD summarizing the results. The Contractor shall repair all leaks discovered under any of the required tests and retest the pipe. The WFD will not accept any installation where a final test has not been passed.

Disinfection Test: Disinfection shall meet ANSI/AWWA C651 - Disinfecting Water Mains. A written Disinfection Plan shall be provided by the Contractor. The Disinfection Plan shall summarize the intended type of chlorine dosage and the method for establishing that dosage. The disinfection may be accomplished by introducing into all the various parts of the new water mains a liquid solution in such volume that the rate of dosage to the water mains shall be at least 25 parts per million of available chlorine. The Disinfection Plan shall document the locations and methods for applying the chlorine into the pipeline as well as methods for dechlorination. Connections at cuttings shall be swabbed with a 50-PPM solution of chlorine at locations when other methods are not applicable. The Contractor shall not proceed with the disinfection procedures until the Disinfection Plan has been approved by the WFD. No more than 1,000 feet of water main shall be disinfected in a single test.

The WFD preference is for chlorine in the form of liquid or tablet (either sodium hypochlorite or calcium hypochlorite) applied at a minimum dosage of 25 parts per million. If gaseous chlorine is to be used, then a hazard mitigation plan and coordination with the fire department will be required. The WFD reserves the right to reject disinfection plans with gaseous chlorine if the WFD deems the hazard to the public to be too great. The pipeline shall remain chlorinated for at least 24 hours and maintain at least 80% of the starting residual at the end of the test.

All chlorinated water shall be de-chlorinated using a neutralizing agent to meet all State and Federal Standards (generally <0.02 ppm). Dechlorination shall take place at the point of discharge in a manner approved by the WFD. Tables are provided in AWWA C651 to guide the contractor in chemical dosing and removal.

All water used in de-chlorination process shall be charged at the base rate for 2,000 cubic feet per flushing event. If more volume than 2,000 cubic feet of water is used, then the current tier rate for that volume of water used above the base will be charged.

After each chlorine treatment the WFD will assist the contractor with dechlorination of the pipeline by operating the distribution valves. Dechlorination will continue until no measurable residual is detected.

Bacterial samples shall be collected both at 24 hours and 48 hours after the line is dechlorinated and delivered for analysis by the WFD by a State certified laboratory. Samples shall be obtained at the approved sampling sections of the main. New water mains will be required to be sampled for both bacteria and heterotrophic plate count (HPC) analysis.

The contractor is permitted to "split" the sample for independent analysis if desired. If any pipeline sample tests positive for bacteria, the entire site shall require additional chlorine disinfection. Flushing is not an acceptable means of removing bacteria from a pipeline. All costs associated with flushing, chlorinating, dechlorinating and sampling shall be paid for by the contractor/owner. Water used for flushing shall be charged at the base rate for 2,000 cubic feet per flushing. If more volume than 2,000 cubic feet of water is used, then the current tier rate for that volume of water used above the base will be charged.

Fire Service Lines

Fire services lines will be disinfected in the same manner as municipal lines. Hydrostatic pressure tests for fire service lines shall be 100, 150, and 200 psig with no loss over 30 minutes using method described above). A test certificate for underground piping shall be provided to the Wareham Fire Department by the owner/tester.

12.0 METER SET-UP

The property owner shall pay for meters in accordance with the rate schedule at the time of service application. All meters shall be supplied and installed by the WFD. All meters shall be the sole property of the WFD and register in cubic feet. All services shall be fitted with a 5/8-inch meter. Requests for larger meters will be considered if documented by a fixture analysis per AWWA M-22 and/or State Statutes and Regulations. All meter set-ups shall include a quarter turn ball valve before and after the meter, meter couplings, meter, suitable backflow device, and a pressure-reducing valve if required. All fixtures, fittings, couplings, and piping from and including the curbstop connecting fitting (except the meter) shall be owned and maintained by the property owner. Meters shall be owned and maintained by the WFD. The property owner must keep meter on his/her premises easily accessible for reading and servicing at all times. The Water Department reserves the right to read, inspect or service the meter at any time (M.G.L. 165, paragraph 11D).

13.0 METERS REQUIRED

Meters shall be required to any building or parcel which takes water from the WFD for any use. All single family residential properties shall meter individually with a 5/8th inch meter. Managed residential multi-unit rental properties (i.e. duplex, apartments, and multi-family) shall have each building metered as one. Multi-unit non-managed, non-rental residential properties (i.e. condominiums, townhouses, dual owner duplex units) shall be metered individually. Commercial properties, other than manufactured housing, shall have individual meters for each building served with water for any use other than fire protection.

WFD owns to the service curb stop as well as the water meter itself. All other service material (e.g. isolation valves etc.) is owned by the property owner.

WFD retains the right to replace the water meter on a periodic basis (typically every 10-15 years), when the meter fails, or operating improperly. WFD retains the right to turn off the water service if reasonable access is not provided to read or service the meter.

Lateral connections which exist prior to the adoption of these rules shall pay an “in lieu of meter” lateral connection fees as defined in the rate table.

14.0 METER PITS

The policy of the WFD is to discourage the use of meter pits. However where deemed necessary by the District, meter pits will be paid for, owned, installed and maintained by the property owner. Meter pits will only be required if, in the opinion of the WFD, it is in the best interest of the WFD (i.e. high ground water tables, excessive service length, lateral connections, seasonal services, no suitable inside meter location). All meter pits shall require the installation of a dual spring-check valve and ball valve.

Meter pits shall be required when the service line is greater than 200 feet. In these cases, the meter pit shall be installed as close to the start of the service line as possible. In cases where a meter pit/vault (or backflow prevention pit/vault) is considered by OSHA regulations to be confined space, the owner will provide a positive air flow system (e.g. fan) meeting OSHA requirements to allow entry as a remediated confined space entry. Owner will be responsible to maintaining the system in working order.

15.0 MANUFACTURED HOUSING - UNIT CHARGE and MASTER METERS

Manufactured housing parks shall be billed the minimum fee per billing for the total number of permitted units. The minimum fee shall be calculated as the minimum allowance per cubic feet (currently 2,000 cf) multiplied by the number of permitted units. The following also apply for manufactured housing parks:

1. Manufactured housing parks shall be master metered solely for paying any usage overage.
2. Usage overage will be charged at the current tier water rates.
3. Manufactured housing parks shall not be subject to lateral connection fees but are subject to fire protection or other readiness to serve fees.
4. No credit will be provided for vacancies.
5. It should be noted that the WFD no longer provides service repair work on private water lines.

16.0 SERVICE INACTIVATION

All water accounts shall remain active for the payment of the "curb-stop" fee until such time the service is disconnected from the water main at the corporation. All costs associated with the removal of a service shall be the responsibility of the property owner.

17.0 BACKFLOW DEVICES

A backflow device shall protect all water services installed. A Watts #7 dual check valve shall protect residential services. A pressure vacuum breaker, reduced pressure zone device, or a testable double check valve shall independently protect irrigation systems. A device as specified by the WFD consistent with the hazard potential shall protect commercial and industrial services.

A testable double check valve or reduced pressure zone device shall protect fire systems as specified by the WFD. All water services requesting a change-in-use/ownership, building or other permits shall be retrofitted with a suitable backflow device as directed by the Superintendent prior to the WFD sign-off of the permit.

All installed testable backflow devices shall be tested by a WFD certified tester on an annual or semi-annual basis. In cases where the backflow is located in a pit/vault, and the location is considered by OSHA regulations to be confined space, the owner will provide a positive air flow system (e.g. fan) meeting OSHA requirements to allow entry as a remediated confined space entry. Owner will be responsible to maintaining the system in working order.

18.0 WATER SERVICE CONFLICTS WITH SEPTIC OR SEWER

Water mains and services should have a lateral separation of ten (10) feet. Should local conditions prevent a lateral separation of ten feet, a sewer may be laid closer than ten feet from a water main if:

- Approved by DPW in writing.
- The elevation of the top (crown) of the sewer will be at least 18 inches lower than the bottom (invert) of the water main. If the WFD has information or believes that the groundwater is elevated in the area of the sewer and water pipe such that a possible cross contamination could exist, the WFD reserves the right to have the water main sleeved or concrete encased.

Water services that fall within the minimum ten (10) foot setback from septic systems or the minimum ten (10) foot sewer setback that do not fall in the above categories must be sleeved or encased in concrete using the following guidelines:

1. Sleeve shall be at least twice the diameter of the water service pipe.
2. Sleeve shall be either SDR35 pipe with push on joints, or a continuous length of 200-psi HDPE tubing.
3. Any portion of the service installed within the ten foot separation limit shall be sleeved to a point at least five feet beyond the setback limit.
4. The sleeve shall extend through the building foundation to the curb stop if the above requirement cannot meet.
5. Sleeve shall be sealed at either end using an expanding foam type insulation sealant.

6. A backflow device on the service is required. In certain applications (i.e. high groundwater), the WFD may require the installation of a meter/backflow pit.
7. The installation must be inspected by the WFD before backfilling. One-day prior notice is required.

19.0 FIRE SERVICE

Fire services shall enter the building separate from the domestic service. Water taps that support both fire and potable water services shall be independently gated immediately outside the building so that neither gate operation will affect the other in use. The following apply to Fire Services:

1. The WFD does not require meters on fire services. All fire services shall pay an annual fee as described in the WFD fee schedule.
2. An approved fire service backflow device shall protect all fire service lines immediately after the point of entry to the structure.
3. Fire services that include an additive for corrosion or freeze protection shall require a reduced pressure backflow device.
4. An annual readiness to serve fee shall apply to all private fire sprinkler systems and private hydrants as prescribed in the fee schedule. This fee shall only provide for the availability of water at the shutoff valve and does not extend to repairs, replacement, painting, landscaping or maintenance associated with the fire protection system or hydrant. Nor does the fee grant to the taker any guarantees or warranties either specific or implied as to the adequacy or lack thereof of pressure, flow rate, and quantity of water available. The fee is billed once a year and is not pro-rated for the year.

HYDRANT PLACEMENT

The placement of fire hydrants within residential developments constructed shall be no more than 500 feet apart. The spacing of fire hydrants in commercial and industrial developments or at sites proposing a specific fire hazard shall be at the discretion of the Fire Chief or their designee, with high hazard areas requiring no more than 300 foot spacing.

For all new water/fire service mains a fire hydrant shall be placed at the point where the water/fire service line either terminates or is at the maximum distance from an existing hydrant. The spacing of hydrants shall be determined beginning from the hydrant placement as prescribed in the preceding sentence. Cul-de-sacs hydrants may be installed "in-line" eliminating the need for the hydrant tee and blow off assembly.

PRIVATE HYDRANTS

Private hydrants will be assessed an annual readiness to serve fee. Inclusive of that fee shall be a requirement for the WFD to periodically flush, check for drainage, operability, and paint and lube the hydrant, and make repairs to the hydrant equal to the value of the annual fee. The cost of repairs in excess of the value of the annual fee shall be paid by the owner. No water may be taken from any hydrant for purposes by any individual not approved to do so by the WFD.

20.0 IRRIGATION SERVICES

Water used for irrigation shall be an independent tap off the domestic service downstream of the meter. No independent meter for irrigation is required. A suitable backflow device as described in the state plumbing code shall independently protect all irrigation systems. Installation of irrigation requires a plumbing permit.

21.0 NON-PAYMENT SHUT OFF POLICY

All original water bills are due and payable within thirty days. Water bills in arrears greater than thirty days are subject to receiving a past due notice and interest charges as prescribed in the rate schedule. The following actions will be taken after the past due notice is provided:

1. If the bill is still outstanding 75 days after the original invoice and no contact is made to arrange for a payment, a letter of termination of water service is sent.

2. If payment is not received as previously described, service may be terminated with a “door knocker” notice delivered prior to the termination date.
3. On the day the service is to be terminated, Water Department staff will attempt to provide verbal notice to any occupant of the premises (or a door tag will be left) that service is to be terminated.
4. A service charge as defined in the rate schedule shall be assessed for collection of payments made at the time of termination.

Any customer, prior to the termination of service, may agree to a written payment plan with the WFD. Any customer requesting a payment plan to avoid shut-off shall be afforded the opportunity to participate in a payment plan provided the account is not in default of a current payment plan.

22.0 PAYMENT PLAN POLICY

Notice of Termination for Nonpayment

When the WFD does not receive payment for bill, the WFD will provide a Notice of Termination. If no payment plan is established and the account reaches the termination level, but the water is not physically turned off, the customer must pay one-half of the termination amount due immediately to avoid termination. The remaining balance must be paid WITHIN two weeks of the first payment. If full payment not received within two weeks, the water will be turned off without further notice.

Restoration of water service to properties whose service is terminated for non-payment or default of a payment plan requires payment in full of all charges due the WFD on the date of termination and any other associated fees as outline here within.

Six Month Payment Plan

The WFD encourages customers to pay their water bills in full at the time they are due. However, in the event a customer is not able to pay the water bill in full, the WFD will allow the customer to pay the bill in installments of 1/6 the total bill plus finance charges for six months. Full payment can be made at any time during this period. If the bill is not paid in full by the end of the 6-month period, the account will move into termination phase.

The first payment shall be due on the first or fifteenth of the month (customer choice) following the execution of the re-payment plan agreement. If the business day is a Saturday, Sunday or a recognized national or state holiday, then the payment will be due on the next business day thereafter. Any customer who fails to comply with the terms of their re-payment agreement with the WFD including the terms and conditions set forth in the preceding paragraph shall be considered in default and shall have their service terminated without the benefit of additional notice.

Any customer who is a party to a re-payment agreement with the WFD, who notifies the WFD in no less than five (5) calendar days in advance of the next payment due, of their inability to make such scheduled payment, shall not be considered in default for that payment, provided that payment is made in full prior to the next monthly payment date and the next month's payment is made in full. Customers who do not meet this requirement are considered in default and will have their service terminated without the benefit of additional notice.

The first payment shall be due on the first or fifteenth of the month (customer choice) following the execution of the re-payment plan agreement. If the business day is a Saturday, Sunday or a recognized national or state holiday then the payment will be due of the next business day thereafter. Any customer who fails to comply with the terms of their re-payment agreement with the WFD including the terms and conditions set forth in the preceding paragraph shall be considered in default and shall have their service terminated without the benefit of additional notice.

Breach of Repayment or Termination Bill

A breach of the repayment agreement either from the six-month payment plan or the default payment plan, or a bill associated with termination will allow the WFD: (i) exercise all legal rights and remedies available

to the WFD and/or (ii) to cause a lien to be committed upon the property for collection that will incur statutory interest until paid in full.

Commitment of Liens

All accounts that are equal to or greater than 9-Months late in payment, or are in default of a six-month payment plan, SHALL be subject to cause a lien to be committed upon the property.

Hardship

In cases where hardship can be demonstrated to the Board of Water Commissioners (e.g. hardship relief granted by the electric utility), the Board of Water Commissioners at their discretion, can modify the terms of repayment.

23.0 FINAL READINGS FOR PROPERTY TRANSFER

The WFD requires final meter reads for all property transfers. Failure of a prospective owner to obtain from an existing owner verification of a final reading and billing shall not be deemed as a means of relief from any charges due the water department prior to assuming ownership. A service charge for this service as defined in the rate schedule shall be charged to the account.

24.0 RETURN CHECK POLICY

Checks payable to the WFD for the purchase of water, materials, labor, fees, and/or services to any account to which the WFD is entitled payment shall be subject to the provisions of MGL c. 266 § 37. The return of any instrument from the institution on which it is drawn, shall require a cash payment of the debt in full, including any additional fees associated with the return of the instrument to avoid or reverse termination of service. Upon receipt of a returned instrument of payment, the WFD shall return said instrument to the drawer by certified mail. Included with the returned instrument of payment shall be a service termination notice. Service may be terminated on the first day after receipt of the certified mail return card or after fourteen days, whichever occurs first. A service fee as described in the rate schedule, and the cost associated with the certified mail, shall be applied to the account for each occurrence an instrument of payment is returned.

25.0 CUSTOMER REQUESTS FOR METER TESTING OR REPLACEMENT

Customers may request that their water meter be tested. The request shall be in writing and state the reason for the test. If a customer believes a meter is over registering consumption, the period to which the over registering claim is made must be stated in the correspondence requesting the test. Failure to specify the period to which the claim is made, shall limit the claim to the last consumption billing period.

Meters found to be operating within two percent of the manufacture's specifications for accuracy shall be deemed accurate. If a meter tests either above or below the accuracy parameters by greater than two (2) percent an adjustment to the bill will be made for the period stated in the request for the meter test.

The WFD for a fee as described in the rate schedule shall test all meters. However, a customer may request that an independent testing company test the meter provided the customer pay for the independent test plus the service fee. A chain of custody shall accompany all meters to be tested.

Any customer requesting a replacement meter in lieu of testing may have a new meter of equal size for the cost of the new meter. A service fee as described in the rate schedule shall be assessed for the installation of the new meter. Meters replaced at the customer's request under this section, will not constitute a basis for an adjustment to charges.

26.0 STANDARD METER REPLACEMENT SCHEDULE

All water meters older than ten (10) years may be replaced at the discretion of the WFD. Costs associated with the replacement of meters shall be as prescribed. All 5/8 meters shall be replaced without cost to the customer. It is the policy of the WFD to reduce meter sizes whenever possible. If a meter is to be reduced in size, the WFD will supply and install the necessary fittings.

The standard meter for most residential and commercial use is 5/8-inch. Customers wishing to keep or install larger meters, may at their own expense, provide the Superintendent a fixture analysis prepared by a qualified professional engineer in accordance with AWWA M22 Standards. Based on the findings contained in the fixture analysis the Superintendent may provide a larger meter.

If, after notification by certified mail and/or door hanger a water taker refuses entry to read, inspect, repair, replace and/or install a meter the District may (1) terminate service, or (2) assess a five hundred (\$500.00) annual service fee in addition to any water usage or other charges incurred by the taker.

27.0 UTILITY MARK OUTS

The WFD is neither required to be, nor is a member of Dig Safe. As such, any rules pertaining to the accuracy of marking utilities as prescribed by that organization do not apply to the Wareham Fire District. This rule is considered by the WFD to be notice to all persons doing any excavations that all water main and service utility markings provided by the WFD shall be considered a directive to the excavator to use all means of due diligence, to include hand digging, to positively locate all water services and mains when excavating. Any damages done to any water main or service because of an excavation other than by hand digging shall be recoverable by the WFD.

The owner or owner's representative shall be required to sign a Water Service Location Survey Waiver / Indemnity Release in which the Owner who receives this service fully understands that the WFD does not own complete surveyed record drawings delineating the precise location of water service lines and other underground lines and structures. As such, the actual location of the water service and other underground lines and structures is unknown. Nevertheless, as a courtesy to the community, the WFD has agreed to use common non-destructive techniques in an attempt to locate and mark out the location of the water service line.

28.0 SEASONAL DEMAND MANAGEMENT & SERVICE LINE LEAKS

Seasonal Demand Management Policy

The purpose of this section of these rules is to provide a means for conserving the water supply during the peak summer demand months and on those occasions of anticipated or actual shortages and when deemed necessary for the health or welfare of the WFD's customers. At a minimum, the WFD shall enforce demand management policies during the period of May 1st to September 30th on an annual basis. This timeframe may be modified and/or extended based on the drought status determined by the State of Massachusetts.

1. The duration of these mandatory restrictions for lawn and landscaping watering using sprinklers shall be for the period between May 1st and September 30th of each and every year. Irrigation of lawns, gardens, and landscaping by a sprinkler, be it either installed or by a hose, is limited to properties corresponding to the day of the month and said properties legal address as follows (e.g. ODD/EVEN authorized watering):
 - a. Address ending in an even number or any fraction of a number or a letter may irrigate on even number calendar days from May 1st and September 30th on an annual basis.
 - b. Address ending in an odd number may irrigate on odd number calendar days from May 1st and September 30th on an annual basis.
2. Owners of newly seeded or sod lawns may apply to the Superintendent for a twenty (20) day exclusion from this rule. A Notice of Exclusion shall be provided by the District. A service fee shall be charged for preparation of the Notice of Exclusion. Exclusions are not transferable, and the notice shall be displayed in a window of the property so as to be visible from the street. The twenty day exclusion shall be for a period not to exceed twenty consecutive calendar days. During drought periods as defined by the State, the WFD may elect not to issue these permits.

3. Enforcement: The BoWC through their designated representatives shall enforce the provisions of this rule. The BoWC shall for each and every violation of this section provide written notice of violation. Said notice shall be issued at the time the violation is observed by the BoWC or their designated representatives. Said notice of violation shall be given to an occupant of the property if one is present or left at the premises if no occupant is present to receive the notice. Said notice shall require the immediate termination of the violation. Advisory notices may be sent to properties reported to the WFD as being in violation of this section. An advisory notice shall not be counted as a violation for the assessment of a service fee.
4. Violations: Written notice of violation as described in the presiding paragraph for the first offense, and thereafter and subsequent violations as prescribed in the rate schedule.
5. The provisions of this section do not apply to watering of lawns, gardens and landscape, or any other water use by a hose held in the hand. Nor shall the provisions of this rule be enforced on the 31st day of any month except as provided for in paragraph (6). Nor shall these rules apply to any customer who uses a separate water supply such as a well or surface water for irrigation.
6. The BoWC, at their discretion, may impose temporary water use restrictions more stringent than those provided for in this section. Said temporary restrictions shall be imposed as the result of a declared water emergency and shall supersede any seasonal water demand measures in place at the time. A water emergency may be declared by the BoWC at any time during drought alerts or advisories issued by the State, or due to circumstances or conditions of a well, storage tower or the distribution system which warrant such a declaration. At a minimum, a declared water emergency shall prohibit the irrigation of lawns, gardens, and landscaping by a sprinkler, be it installed or by hose. Other water restrictive use measures may be imposed by the BoWC at any time during a declared water emergency if conditions warrant additional restrictions. A water emergency once declared by the BoWC shall remain in effect for no less than five days and until further notice is provided.
7. The provisions of this section shall not apply to independent sources of water used for lawn irrigation such as private wells, streams, or ponds.

Service Line Leaks

Notice of leaks on the service line owned by the homeowner shall be repaired by a WFD approved contractor within thirty (30) calendar days of receiving written notice by the WFD, or approved alternative timeline by the WFD in writing. Service lines which are not repaired in the timeline provided will be provided with a warning of shutoff. If no action occurs after seven (7) calendar days of receiving the shut off warning, the water will be turned off until such time the service line is repaired and inspected by the WFD.

29.0 RESIDENTIAL WATER SERVICE APPLICATION RULES

WATER SERVICE APPLICATION PROCEDURE – The property owner or their representative shall complete a Water Service Application Card at the Water Department. Applications should be submitted at least ten (10) days before the installation of the service. The system development fee shall be paid at the time the application is made. Building permit signoffs require completion of a Water Service Application Card. (Note: Filing the application activates the account for billing.) No water service will be permitted to any building connected to a well. Buildings on properties with wells may be serviced provided there is no physical connection between the well and the interior plumbing.

PLANS FOR RESIDENTIAL SERVICES – A simple plot plan is required for new installations. The plan shall show the proposed location of the water service in relation to the roadway and the dwelling. The plan does not have to be prepared by an engineer, unless the lot is to have a septic system. The location of the service may be altered in the field with the concurrence of the Superintendent or his designee. A detail plan may be required for installations greater than 150 feet in length, that cross wet or wooded lots, are within ten

(10) feet of a septic system, require a meter pit, or some other condition exists where a plan would benefit the water department. Services installed under slab foundations shall be sleeved.

SCHEDULING SERVICE TAP - For new curb stops, the owner/contractor shall schedule the tap with the WFD. A plot plan is required. Owner is responsible for road cut, trenching, backfill, road repair, safety, and traffic control within the right-of-way. Meter pits may be required depending on site conditions. Owner shall obtain a Dig Safe number and all permits for State roads. The WFD will obtain excavation permits on behalf of the applicant for work with Town's right-of-way. Applicants should consult the WFD for a cost estimate for the tap work.

SCHEDULING SERVICE LINE INSPECTION FROM CURB STOP TO FOUNDATION - Inspections must be done before backfilling the trench. No inspections will be performed on service lines not connected to an active curb stop. A ball valve and trace wire must be installed on the service line inside the foundation for the inspection. Service lines installed within a slab foundation shall be sleeved. Owner shall be responsible for all costs associated with installing the service line from curb stop to meter. Inspection on previously backfilled or dry installed lines requires a pressure test. Inspections shall be scheduled before 2:00 p.m. on the workday before the actual installation. There is no charge for scheduled inspections. Requests for same day inspections require a \$70.00 service fee.

WATER SERVICE MATERIALS - All residential water taps shall be one (1) inch. Service tubing shall be sized per AWWA M-22. All backfill shall be suitable material free of debris and stones greater than 4-inch in size. All connections shall be compression type fittings with stainless steel inserts; flared fittings are not permitted. All material must be installed as to have no leakage under pressure. All water service tubing shall be Copper Tube Size (CTS) 200 psi Polyethylene (HDPE) tubing conforming to AWWA C-901. Tracing wire on plastic tubing is required.

All curb boxes shall be North American made "Buffalo" Style 2½-inch to include cover, slide top, and base. The curb box shall measure in length from the curb stop to the finished grade plus six (6) inches. All curb stops shall be centered and plumbed in the box at a depth of between four and six feet below *final* grade. The owner is responsible for the final placement of the curb box.

SCHEDULING METER INSTALLATION - The residential meter setup, spacer bar, and backflow device must be installed before the meter can be set. Water meters shall be installed and water turned on only by water department personnel. Meter appointments shall be scheduled before 2:00 p.m. on the workday before the actual installation. Plumbers/owners may pick-up a spacer from the WFD. There is no charge for scheduled appointments. Requests for same day installations require a \$70.00 service fee.

All meters shall be supplied, installed, and owned by the WFD. All services shall be fitted with a 5/8-inch meter. The meter set-up shall include a quarter-turn ball valve before and after the meter, meter couplings, meter, suitable backflow device, and a pressure-reducing valve if required. All fixtures, fittings, couplings, and piping from and including the curbstop connecting fitting (except the meter) shall be owned and maintained by the property owner. A Watts #7 style backflow device shall protect all services. **Please consult the local plumbing inspector for applicable codes.**

SCHEDULING OCCUPANCY PERMIT INSPECTION – Final inspections for occupancy permits shall be scheduled with the water department. Sign-off inspections must be scheduled before 2:00 p.m. on the workday before the sign-off is needed. It is strongly recommended that the sign-off inspections be requested 3-5 days prior to the need of the permit so that any noted deficiencies can be corrected. There is no charge for scheduled appointments. Requests for same day sign-offs require a \$70.00 service fee. All noted deficiencies must be corrected prior to the sign-off of the permit.

30.0 PLUMBING FAILURE – ABATEMENT POLICY

Abatements shall be given at the discretion of the Board of Water Commissioner's based on the following criteria:

1. A written request submitted in a timely manner.
2. An abatement will not be provided if an insurance company has or can cover the bill.
3. The water leak must be repaired. Evidence that the repair has been fixed must be provided.
4. One abatement will be provided per property owner for the period of ownership of the house. The owner will be determined by the name on which the water service is assigned to in the billing software. If the owner changes, another abatement will not be allowed for a period of 10 years after the date of the previous abatement.
5. Calculate the abatement as follows:
 - a. Deduct the allowance from the total consumption so that only excess consumption is left. The allowance in FY19 is 2,000 cubic feet.
 - b. Determine the normal consumption by averaging the most recent four summer periods or four winter periods that match the period of the requested abatement. If no use is used during one of the seasonal periods (e.g. foreclosure, seasonal, etc.), the most recent season of use average will be utilized.
 - c. Subtract the overage from the average overage consumption over the allowance for the period. This will be considered the excess water associated with the leak.
 - d. Abate 50% of the excess water at the highest tier rate at which the water was billed.
6. This policy can be changed or revoked by the Board of Water Commissioners by an affirmative vote.

31.0 WATER METER TAMPERING POLICY

Meters will be supplied by the Water Department. All existing and supplied Water Meters are the property of the Water Department.

Any person employed by the Wareham Fire District, at the direction of the Water Superintendent, may at any time enter any premises supplied with municipal water for the purpose of examining or removing meters, pipes, fittings and works for supplying or regulating the supply of water and of ascertaining the quantity of water consumed or supplied in accordance with the Massachusetts General Laws and Board policies and regulations. (M.G.L. c. 165 § 11 et seq)

The Department reserves the right to remove, repair or replace any meter at any time as it deems necessary in its sole and absolute discretion. Meters shall be repaired and replaced from time to time as deemed necessary in order to ensure their accuracy in recording water usage at any facility serviced with municipal water.

If a meter fails to register or under-registers outside the manufacturer acceptable accuracy range for any cause other than tampering, the charge for the water shall be based on the average amount registered by the meter when in order for similar billing periods, using available billing records over the previous 5 years. Charges will be calculated covering the probable use period over which the meter was not registering correctly. Charges shall constitute water usage and as such, if not paid when billed, shall be committed as a lien to the Town Treasurer/Collector for real estate tax purposes consistent with applicable law.

All repairs or injuries to meters from freezing, hot water, or external causes shall be charged to the consumer.

No person shall change, or tamper in any way, with the water meter, including appurtenances. All settings and repairs will be made by the Water Department personnel. Tampering with a meter, such that said meter does not record the true and accurate water usage at a facility serviced with municipal water, will result in a \$1,000 fine.

Should there be evidence of tampering which has resulted in reduced water bills, the Department shall calculate a charge based on the two highest uses for the winter and summer billing periods over the past 10 years, or available records, and adjust the bills to these usage amounts for the period of probable reduced water bills. The Water Department shall bill the amount so calculated as water usage, the non-payment of which when due and payable, shall be committed as a lien to the Town Treasurer/Collector for real estate tax purposes consistent with applicable law. In addition, the user will be charged for staff time and/or legal time spent to address the matter, the cost of a replacement meter if required, as well as a fine of \$200 per billing cycle where meter tampering led to a reduced bill. Massachusetts law allows additional penalties for tampering with a water meter, including up to one year in prison, which the Board may pursue at its discretion.

32.0 SCHEDULE OF RATES, FEES & CHARGES

A. DEFINITIONS

BETTERMENT DEVELOPMENT FEE: Any lot having frontage on a public or private way that was part of a previous betterment project, annexation, or area of special assessment of the WFD that had not been previously assessed a betterment in that project will pay an amount equal to the per unit betterment charge assessed for that project and any cost to bring water service to that location. This betterment/assessment also applies to lots which may obtain an easement to water mains that were part of a bettered project area.

1. No amortization will be applied except for out of District properties.

WATER MAIN EXTENSION FEE: Water main extensions constructed by the WFD, which are tapped off of or otherwise extended from an existing water main, that was not installed under a betterment project and are intended to serve one or more properties will be assessed a water main extension fee.

The amount derived from the water main extension project undertaken by the WFD divided by the whole number of residential units then eligible to be connected to that individual project as determined in accordance with the provisions of G.L. c. 40 §§ 42 (G) – 42 (K).

1. All connection development fees shall be paid at the time of application in full to the WFD and are not refundable.
2. All work must be constructed completely by WFD approved contractors duly licensed and authorized to do such work at the applicant's sole cost and expense.

B. WATER SYSTEM BETTERMENT OR EXTENSION FEE

Residential:

1. **Existing Housing Units:** Any existing housing unit not previously serviced by municipal water having access to municipal water shall pay a connection development fee as set forth in Table No. 5 – New Service Development and Meter Charge, plus a water system development fee per unit of either the ***Betterment Development Fee*** per unit or ***Water Main Extension Fee*** per unit whichever is greater as those terms are hereinafter defined.
2. **New Residential Construction Units:** Newly constructed residential units with access to municipal water shall pay a connection development fee as set forth as set forth in Table No. 5 – New Service Development and Meter Charge plus a water system development fee per unit constructed of either the ***Betterment Development Fee*** per unit or ***Water Main Extension Fee*** per unit, whichever is greater as those terms are hereinafter defined.

Non-Residential:

Shall pay a connection development fee as set forth in Table No. 5 – New Service Development and Meter Charge plus a water system development fee per unit of either the ***Betterment Development Fee*** per unit or ***Water Main Extension Fee*** per unit whichever is greater as those terms are hereinafter defined.

In all cases, fees shall be paid in full at the time of application.

C. CHARGES APPLIED BY THE WAREHAM FIRE DISTRICT

The following tables are a listing of the rates, fees and charges applied by the WFD.

Table 1: Billing Rates

FISCAL YEAR BEGINNING 1 JULY	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
Water Consumption Bin	\$ Flat Fee			
BASE RATE MINIMUM <2,000 CUBIC FEET	\$ 120.00	\$125.00	\$130.00	\$135.00
	\$/Hundred Cubic Feet (HCF)			
OVER 2,000 TO 4,000 CUBIC FEET	\$ 0.85	\$ 0.85	\$0.85	\$0.85
4,001 to 10,000 CUBIC FEET	\$ 3.40	\$ 3.40	\$3.40	\$3.40
10,001 CUBIC FEET	\$ 3.85	\$ 3.85	\$3.85	\$4.25

Table 2: Capital Improvement Project (CIP) and Water Quality Management Fees

FISCAL YEAR BEGINNING 1 JULY	\$/ Hundred Cubic Feet (HCF)				
	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
CIP WATER TOWER/MIXER	\$0.1497	\$0.1389	\$0.1337	\$0.1270	\$0.1222
CIP WATER MAIN REPLACEMENT	\$0.3026	\$0.2801	\$0.2537	\$0.2556	\$0.0558
WATER TREATMENT PLANT	\$1.5247	\$1.5058	\$1.4886	\$1.5469	\$1.5311
CIP MAPLE PARK WELL	\$0.4833	\$0.4521	\$0.4309	\$0.4387	\$0.3109
GROUND WATER PROTECTION LAND	\$0.1181	\$0.1107	\$0.1047	\$0.1100	\$0.1069

Notes: Non-Metered CIP/WQMF Minimum: 2,000 cubic feet per rate schedule

Table 3: Miscellaneous Fees

Item	Cost
Non-Metered Active Lateral Service Fee	\$20.00 per building
Hydrant Water Rentals	Hydrant Meter Rental, or 5/8 Meter/Backflow Device Rental of \$20.00 per week plus; minimum for the first 100 cubic feet, plus; overage per 100 cubic feet additional.
Frozen or damaged meter replacement	List price of meter plus service call charges as required.
Certified Mail Notice	Mailing cost plus \$2.10 administrative surcharge.
Interest	Fourteen percent (14%) semi-annually, compounded on outstanding balances thirty days past due.
Return Check Processing Fee	\$30.00 plus postage and mailing administrative surcharge
Site Plan Review	
Single Residential Connection	No Charge
Up to Three Connections	\$105.00
Up to Ten Connections	\$210.00
Greater Than Ten Connections	\$320.00
Commercial Site Plan Review	\$380.00
Inspectional Services	

Item	Cost
New Residential Scheduled Service Line Inspections	Included in the system development fee.
New Residential Same Day or Unscheduled Service Line Inspections	\$70.00
Commercial Development Inspection Services	Three percent (3%) of improvement or hourly on-site rate.
Outside Water Sales	
Water considered an outside water sale shall be charged the following:	
1. Administrative Labor Fee	
2. A flat fee for the first HCF of water	
3. Water after the first HCF will be billed at the tiered rates in Table 1	
Fire Protection Charges	
The Prudential Committee shall pay a fee equal to eleven (11%) of the total Water Department budget adopted at the annual District Meeting for each fiscal year.	

Table 4: Service Call Fees

Service Calls During Non-Holiday Regular Business Hours.	Cost
Scheduled Service Call (all categories except meter testing)	\$45.00 each
Meter Bench Testing	\$80.00 each
Out of Office Collection to avoid service termination	\$45.00
Non-scheduled Service Calls	\$75.00 each
Seasonal meter removal and install	\$55.00 each
Service line locating main to curb box	No Charge
Service Calls – Other Than Regular Business Hours	
All after hour, weekend, holiday emergency service calls	\$185.00 each
New Service Installation	
WFD shall make all taps for one and two-inch services. Tapping costs shall be job specific based on current material, labor and equipment charges. NOTE: Tapping charge pays only for the material and labor for the water main tap to curbstop. No excavation, road repair, permits, or a police detail is included. The Superintendent or designee will provide an estimate for taps on request.	
Water Conservation Fines ¹	
Sprinkler Non-Compliance 1 st Notice	Written Warning Notice
Sprinkler Non-Compliance 2 ^d Notice	\$20.00 each
Sprinkler Non-Compliance 3 ^d Notice	\$40.00 each
Sprinkler Non-Compliance 4 th and Subsequent Notices	\$55.00 each
Sprinkler 20-Day Exclusion Notice	\$25.00 each
Miscellaneous Service Charges	
Turn off or un-authorized turn on	\$240.00 each
Backflow Inspections/Testing	\$75.00 each
Fire Flow Test Technical Support	\$175.00 each

Notes

1. The State Executive Office of Energy and Environmental Affairs has four levels of Drought: Advisory, Watch, Warning, and Emergency. During Emergency status, the Water Conservation Fines will double the values shown in Table 4 and no 20-day exclusion notice shall be provided. WFD reserves the right to turn off water for significant non-compliers during emergency drought events. More information on Drought status can be found under the State's drought monitoring webpage.

Table 5: New Service Connection Development Fees and Meter Charge

Service Tap or Meter	Development Fee
1-inch with 5/8 meter	\$ 903.89
1 ½-inch	\$ 1,255.64
2-inch	\$ 2,141.97
3-inch	\$ 8,124.71
4-inch	\$10,340.81
6-inch	\$15,510.81
8-inch	\$21,419.69
12-inch	\$35,721.37
Fire Service 4-inch or less	\$ 1,477.22
Fires Service > 4-inch & hydrants	\$ 2,954.44

Notes

* Charged per billing.

** Included in minimum fee.

Table 6: Meter Maintenance Charge (Billed Every Billing Period - Currently Every 6 Months)

Meter Size	Fee
5/8- inch	N/A
3/4-inch	\$18.30
1-inch	\$19.40
1 ½-inch	\$37.00
2-inch	\$45.90
Sizes 3 -inch and above	TBD for project

Table 7: Fire Protection Readiness to Serve Charge (Private/Town)

Readiness to serve charge includes usage required for fire suppression and testing.

Fire Line Size ²	Multiplier (2-inch equivalent)	Annual Readiness to Serve Charge
2-inch	1.0	\$56.42
3-inch	2.8	\$157.98
4-inch	5.7	\$323.86
6-inch	11.2	\$631.93
8-inch and larger	32.0	\$1,805.51
Hydrants	2.5	\$141.06

² As measured on diameter of rise pipe when it first comes through floor or slab of the building

APPENDICES

Appendix A: Hydrostatic Testing Procedure and Associated Forms

Appendix B: Commonly Asked Questions

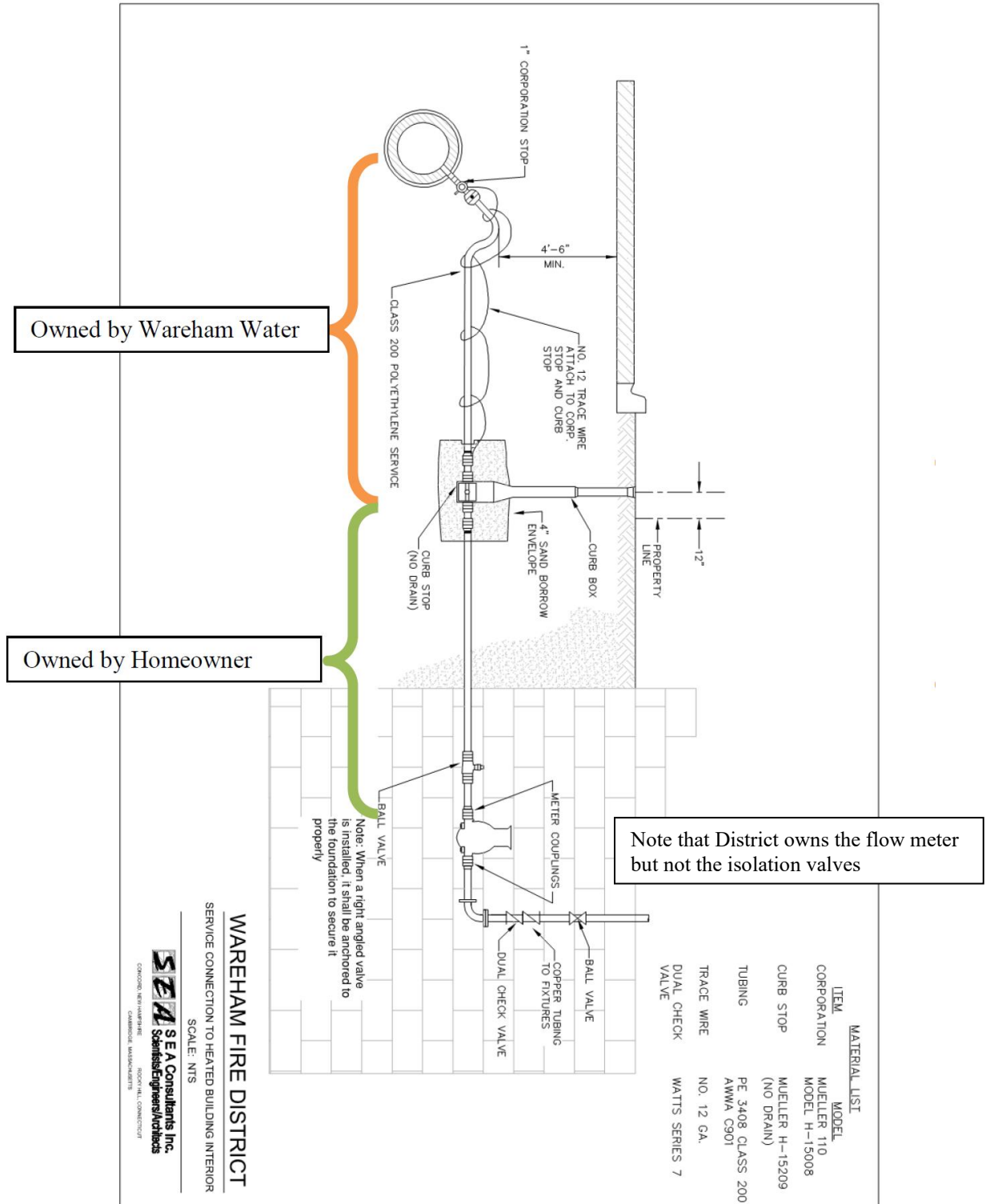
1. Why do I receive a charge for our fire suppression system?
 - a. Fire lines typically are not metered. This charge is a readiness fee to provide the necessary water to the premises for fire suppression.
2. Why do I receive a charge for non-metered active lateral service fee?
 - a. Early in the history of the Wareham Fire District, it was not uncommon for buildings on the same grounds to have a lateral line run to another building which was not metered. This is a practice we no longer allow, but for those buildings which were grandfathered, this fee will show up on your bill as a flat fee for water consumed.
3. What does the new service connection development fee cover?
 - a. The purpose of this fee is to cover the cost of the infrastructure that has already been built to provide you water.
4. How do I find out where my water service line is located?
 - a. You can call the Water Department and we will come out to mark out the approximate location(s) of your water service line.
5. Who owns the water service line?
 - a. The WFD owns to the curb stop isolation valve. The homeowner owns from the curb stop to the water meter. See Figure in Appendix C.
6. Why do I need to use a WFD approved contractor to repair or update my water service line?
 - a. Since the WFD does not own the service line between the curb stop and water meter, the WFD wishes to ensure that contractor performing the work is qualified and installs the service line within the guidelines and rules and regulations of the WFD. Service lines installed incorrectly have a greater propensity to leak which is lost water. Lost water increases the cost of the water to you.
7. I do not understand how my water bill is calculated.
 - a. Your bill can be broken down into five main categories of charges:
 - i. Flat fee charged for up to 2000 cubic feet of usage. See Table 1.
 - ii. There are three bins set up for water consumption over 2,000 cubic feet at an increasing rate. The purpose of these bins is to encourage water conservation. See Table 1.
 - iii. Capital Improvement Project or CIP fees used to recover the cost from rehabilitating projects or projects improving the water system. See Table 1
 - iv. Late charge fees.
 - v. Service fees or miscellaneous fees as noted.
 - b. An example bill that has been marked-up is provided below. An individual account uses 4,000 cubic feet (cf) of water over a 6-month period. The consumption is broken down as 1.) 2,000 cf flat fee of \$120 and 2.) 2,000 cubic feet (i.e. 4,000 minus 2,000 cf) at the step one usage of \$0.85/100 cf or \$17.00. The total consumption portion of \$137.00. The CIP fee (FY19) is \$2.2078/100 cf. For 4,000 cubic feet of usage yields a CIP bill of \$88.31. The total water bill would then be $\$137.00 + \$88.31 = \$225.31$.
8. How many gallons are in 1 cubic foot?
 - a. There are approximately 7.48 gallons in 1 cubic foot of water.
9. Why do I pay for a backflow testing fee or for installing a cross connection device?
 - a. A cross connection is defined as a physical connection between water that is potable with water that is not potable. Under 301 CMR 22.22 - Cross Connection Distribution System Protection, the state requires the WFD to test the cross-connection systems. As such, the WFD charges for these cross-connection tests to recoup the cost to have staff to maintain these systems per State Law.

10. Why do I pay a meter maintenance fee?

- a. The purpose of this fee is two-fold. The first is to encourage users to obtain the smallest water meter. Generally, the smaller water meters are more accurate at metering smaller flows. The second reason is to recoup the cost of the meter replacement when the meter is replaced. The District does not charge for replacement meters at the time of installation and as a goal replaces meters at an age of 10 to 12 years old. The water meters and associated components cost (2019 dollars) the following:
 - i. $\frac{3}{4}$ inch meter: \$360
 - ii. 1-inch meter: \$382
 - iii. 1.5-inch meter: \$729
 - iv. 2.0-inch meter: \$903

Appendix C: Profile of Service Line and Demarcation of Ownership

Note Water Meter Owned by WFD.



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PROJECT UTILITY COORDINATION FORM

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CONTACTS AND GENERAL UTILITY INFORMATION

2/27/2026
Revision
Date:

City/Town: Wareham	Project File #: 610647	PUC Completed by: RAC	Utility Pole Set: EverSource-Electric
Route/Street: Route 6 (Marion Road) at Swift Beach Road	Resident Engineer:	Mass DOT PM: Kathy Dougherty	Scheduled Ad Date: 3/14/2026
Total Poles Relocated:			47
			2/27/2026 PRINTED

[illegible]

**Only Reduction Notes for MassDOT Contractor**

Unless otherwise noted by Contract, the MassDOT Contractor is to provide the District Construction Office with 7 Calendar Days advance notification in order to validate the current progress and provide the required 30 Days advance notice-to-proceed for the first Utility - and each subsequent Utility. These advance notifications are to be identified in the Contractor's Schedules (Pre-Con preparation, Baseline, Subnets, and Updated/Monthly Schedules) as specified in Subsection 8.02 (for DBB Contracts) and/or Section 9 (of DB Contracts). Note: The durations included below do not include these lead-times. See Additional 'Important Basis notes for Contractor' - on last PUC Form page.

Suggested Sequence of Relocation (Based on Consultant proposed construction staging)

Suggested sequence of relocation (based on consultant proposed construction staging)
The sequence as detailed on the following pages is based on the consultants proposed staging plan. This information was compiled through meetings that included all of the utilities listed below along with the designer and the Town of Wareham. The information provided is the best available information prior to project advertisement.

PUC FORM - CONTINUED

Is 'enabling' (prep) work, by the Contractor, necessary prior to the start of the first series of utility relocations:	Yes	No
	X	
Has any of the Utility work been identified to work concurrently	Yes	No
		X

2/27/2026
PRINTED



47

RESPONSIBLE PARTY	DESCRIPTION - Utility Relocation Phases, Tasks and Activities	Estimated Duration (Work Days) by Utilities (Lead time not included)	Concurrent / Exclusive Utility Work				Access Restraint & Limitations of Operations Notes	
			Exclusive Utility on site	Concurrent Utilities	Contractor Off-Site	Contractor Concurrent	Potential Access Restraint	Should an AR be considered for the Contractor?
Stage - 1	Enabling work by the Contractor - To notify utilities 30 day prior to starting work. Remove any trees, clearing and grubbing, grading shown on plans. Contractor to install relocated conduit system for Verizon. Contractor to install all conduit, manhole, hand holes, riser and sweeps required by the utilities companies. Coordinate item 826-7.		Utility working with no other utilities in vicinity	Utility working with other utilities on site	No Contractor physical construction on-site (while Utility is Contractor and Utility are working on-site in the same vicinity)	Contractor Concurrent	(Yes/No)	Reason/Note (optional)
C = Contractor	U = Utility Co.							
Task 1	Eversource Electric u Utility pole / wire / equipment relocations, Push Braces, G&A Systems along RTE-6 from Cromesett Rd to Gibbs Ave. u Remove/Transfer/Install Primary cable, LA's and CO's for poles along existing RTE 6 pole line. u Remove/Transfer/Install Secondary cable for poles along existing RTE 6 pole line. Sub-Total 108	85 17 6	X X X					
Task 2	UTILITY OPERATIONS - Aerial Wareham DPW Street Lights u **Transfer (9) pole mounted lights will be taken care of thru towns streetlight contract. Not seeking force account Sub-Total 9	9	X					
Task 3	UTILITY OPERATIONS - Aerial Open Cape u Frame new utility pole sets. Includes travel to site and safety set-up. u Place new aerial ADS5 144F between proposed splice locations on new pole line. Transfer existing fiber to 2 new utility pole sets. u Butt splicing ADS5 144F at project beginning and end. Night cutover required. u Wreckout existing 144F off of old pole line. Sub-Total 12	3 3 2 4	X X X X					
Task 4	UTILITY OPERATIONS - Aerial Wareham Fire Dept. u **cut decommissioned fire alarm wire: not seeking force account Sub-Total 3	3	X					
Task 5	UTILITY OPERATIONS - Aerial Comcast u Installation of 4,430' of stranded wire and coaxial cable. u Cold splicing of network devices u Activation of new coaxial system u Delash fiber optic cable from the old strand u Relash fiber along the new route u Removal of old strand and cable Sub-Total 43	15 5 5 10 5 3	X X X X X X					
Task 6	UTILITY OPERATIONS - Aerial Verizon u New Pole placed by Eversource and all other parties attached to poles have transferred their facilities u Verizon contract work to relocate riser to new poles u Place guying,newcables, and transfer existing cables u Splice and cut over from old cables to new cables u Remove old cables and plant Sub-Total 345	0 28 112 159 46	X X X X X					
Task 7	UTILITY OPERATIONS - Underground Ngrid Gas u **Adl Gas Gates Sub-Total 5	5	X					
Task 8	UTILITY OPERATIONS - Underground Verizon u Verizon contract work to connect new conduit placed by contractor to existing conduit system u Place new underground cable u Splice and cut over from old to new cables u Remove old cables Sub-Total 102	23 21 45 13	X X X X					

RESPONSIBLE PARTY	DESCRIPTION - Utility Relocation Phases, Tasks and Activities	Estimated Duration (Work Days) by Utilities (Lead time not included)	Concurrent / Exclusive Utility Work				Access Restraint & Limitations of Operations Notes	
			Exclusive Utility on site	Concurrent Utilities	Contractor Off-Site	Contractor Concurrent	Potential Access Restraint (Yes/No)	Should an AR be considered for the Contractor?
C = Contractor U = Utility Co.	DESCRIPTION - Utility Relocation Phases, Tasks and Activities		Utility working with no other utilities in vicinity	Utility working with other utilities on site	No Contractor physical operations on-site (while Utility is Contractor and Utility are working on-site - but NOT in the same vicinity			
IMPORTANT BASIS NOTES - FOR CONTRACTOR 1 Unless otherwise specified in the MassDOT Construction Contract, or unless specifically noted within this PUC Form, these durations (herein) are based upon the Contractor providing <i>unimpeded access</i> to the Utility company to perform Utility relocations (see Note 5 - Access). 2 "Concurrent Utilities" operations noted herein, are to signify those Utility Company operations that can be worked concurrently (e.g. Utility A and Utility B work on-site together) - MassDOT and the Contractor are to prepare NTPs to Utilities accordingly. 3 "Potential Access Restraints" noted within this PUC Form are for planning purposes. See MassDOT Contract for Contractual Access Restraints (refer to Subsections 8.02, 8.03, and/or 8.06 for Design Bid Build Contracts and Volume II Section 9 for Design Build Contracts). 4 Utility non-work periods - For planning purposes, the durations above contain some non work days (contingency) for New England conditions (precipitation, high temperatures, low temperatures, snow, ice). Gas line work however, typically has a seasonal restriction and can NOT be installed from 15-November to 15-March. Municipally Owned Electric and Gas Utilities are also restricted from proceeding from 15-November to 15-March. The Contractor shall (and the CTD plan) reflect this calendar restriction within the schedule (unless otherwise note). 5 Access - Unless otherwise noted in the Contract, and in addition to the 'enabling' notes above, the Contractor must provide safe and unimpeded access (for trucks, lifts, cranes, etc.) to the Utilities, to allow for the proposed relocation(s) - including but not limited to snow removal, clearing and grubbing, guard rail removal, barrier removal, tree removal, and grading. 6 For all MassDOT construction contracts issued after January 2014, the new Utility Coordination/documentation specification is required. This is Section 8.14 in Design-Bid-Build Contracts (see Design-Build index reference for applicable section #). 7 Prior to starting any and all enabling work for Utilities, the Contractor is to plan in advance with submittals and approved durations. 8 * Potential District Initiated Early Utility Relocation - if noted herein, the District reserves the right to initiate early utility relocation in advance of the Contract NTP. In submitting a bid price and in the development/basis of the Baseline Schedule, the Contractor shall not plan the Work with the potential benefit of any form of 'early utility relocation.' As a requirement of the Baseline submission, unless otherwise noted in this Specification, the earliest that the first Utility company is to receive the 30 days advance notification to mobilize to the site, will be 7 calendar days after the pre-construction meeting and never sooner than 7 days after the Contract NTP. 9 ** Assumed Duration, Not Provided By Utility Company.								

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DOCUMENT A00820

**Massachusetts Department of Transportation
Conditions of Custody****REQUEST FOR RELEASE OF MASSDOT AUTOCAD FILES FORM**

(Only to be used following award of contract)

City/Town: WAREHAMProject File Number: 610647Contract Number: 133932Project Description: FAP No. STP-0035(068)X Corridor Improvements on Route 6 at Swifts Beach Road

All AutoCAD files are provided solely as a courtesy to facilitate public access to information. MassDOT attempts to provide current and accurate information but cannot guarantee so. MassDOT provides such documents, files or other data "as is" without any warranty of any kind, either expressed or implied, including but not limited to, accuracy, reliability, omissions, completeness and currentness. The Commonwealth of Massachusetts and its Consultants shall not be liable for any claim for damages, including lost profits or other consequential, exemplary, incidental, indirect or special damages, relating in any way to the documents, files or other data accessible from this file, including, but not limited to, claims arising out of or related to electronic access or transmission of data or viruses. Because data stored on electronic media can deteriorate undetected or be modified without our knowledge, MassDOT cannot be held liable for its completeness or correctness. MassDOT makes no representation as to the compatibility of these files beyond the version of the stated CAD software.

By signing this form, I agree that it shall be my responsibility to reconcile this electronic data with the conformed contract documents, and that only the conformed contract documents shall be regarded as legal documents for this Project. I understand that this authorization does not give me the right to distribute the files. I agree to the terms above and wish to receive the AutoCAD files.

This signed form shall be emailed to the Highway Design Engineer at the MassDOT -Highway Division at the following email address:

DOTHighwayDesign@dot.state.ma.us

Attn: AutoCAD Files

Name of person requesting AutoCAD files: _____

Affiliation/Company: _____

Address: _____

Telephone number: _____

Email address: _____

Signature/Date: _____

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DOCUMENT A00860

MASSACHUSETTS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF INTENT

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Notice of Intent Corridor Improvements

**Route 6 and Swifts Beach Road
Wareham, Massachusetts
MassDOT Project Number: 610647**

Submitted to:

**Town of Wareham
Conservation Commission**

Prepared for:

Massachusetts Department of Transportation

December 23, 2024



December 23, 2024

Christine Santos, Conservation Agent
Wareham Conservation Commission
Memorial Town Hall
54 Marion Road
Wareham, MA 02571

**Re: Notice of Intent
Corridor Improvements
Route 6 and Swifts Beach Road
Wareham, Massachusetts
MassDOT Project Number: 610647**

Dear Ms. Santos:

On behalf of the Massachusetts Department of Transportation, Highway Division (MassDOT), Tetra Tech is pleased to submit the enclosed Notice of Intent (NOI) for corridor improvements on Route 6 and Swifts Beach Road in Wareham, Massachusetts.

This NOI is submitted pursuant to the Massachusetts Wetlands Protection Act (MAWPA; MGL Ch. 131, s. 40) and Regulations (310 CMR 10.00 et seq.). As an agency of the Commonwealth providing essential government functions, MassDOT is exempt from certain municipal requirements including but not limited to wetland bylaws, ordinances and policies, and for paying peer review fees. Therefore, this project is exempt from the Town of Wareham Wetland Protective By-law. In addition, as described in the Wetlands Protection Act Regulations (310 CMR 10.05(4)(a)), MassDOT Highway Division is not required to notify project abutters.

The existing four-lane roadway in the project area will be reconstructed with one travel lane in each direction with a 5 ½ -foot-wide sidewalk on the north side of the roadway and a 5-foot-wide grassed buffer and a ten-foot-wide shared use path on the south side of the roadway. Because of the removal of one travel lane in each direction, also known as a Road Diet, the proposed project will reduce impervious area within Land Subject to Coastal Storm Flowage (LSCSF) by 1,320 square feet (sf). While there will be a reduction in impervious area within LSCSF, the project will fill an area of approximately 9,670 sf within LSCSF with approximately 3,688 cubic feet (cf) for corridor improvements. There is no regulatory requirement for compensatory flood storage in a coastal environment. There are no performance standards for Land Subject to Coastal Storm Flowage. The proposed project will also reduce impervious area within the Riverfront Area by 1,320 sf.

Portions of the Project within the Buffer Zone and Riverfront Area and outside any areas specified in 310 CMR 10.02(1)(a) through (e) qualify as a minor activity in the Buffer Zone/Riverfront Area and are not otherwise subject to regulation under the MAWPA. These minor activities include the conversion of impervious to vegetated surfaces (310 CMR 10.02(2)(b)2f), pavement repair, resurfacing, and

Marlborough Technology Park
100 Nickerson Road, Marlborough, MA 01752
Tel 508.786.2200 Fax 508.786.2201 tetratech.com

reclamation of existing roadways (310 CMR 10.02(2)(b)2p), and vegetation cutting for road safety maintenance (310 CMR 10.02(2)(b)2n).

Additionally, the Project work within the Riverfront Area that is not exempt qualifies as a "limited project" under the Wetlands Protection Act Regulations (310 CMR 10.53(3)(f)) for maintenance and improvement of existing public roadways, including widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems. Project work within Land Subject to Coastal Storm Flowage also qualifies as a "limited project" under the Wetlands Protection Act Regulations (310 CMR 10.24(7)(c)1) for maintenance and improvement of existing public roadways, including widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems.

Please advertise this matter and place it on the agenda for the next scheduled Conservation Commission meeting. We look forward to meeting with the Conservation Commission to discuss the proposed project at that time.

Please feel free to contact me by phone at (508) 786-2278 or by email at ed.hutchinson@tetrattech.com if you have any questions concerning this submittal. Thank you.

Very truly yours,



Edward T. Hutchinson, PWS
Senior Project Scientist

cc: MassDEP Southeast Region
Erica Larner, MassDOT
Melissa Lenker, MassDOT
Lily Collins, MassDOT

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LIST OF APPENDICES

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WPA Form 3
Notice of Intent



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

WAREHAM

City/Town

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

Marion Road (Route 6) and Swifts Beach Road

a. Street Address

Wareham

b. City/Town

02571

c. Zip Code

Latitude and Longitude:

41.754830

d. Latitude

-70.732606

e. Longitude

N/A - Roadway Right-of-Way

f. Assessors Map/Plat Number

N/A - Roadway Right-of-Way

g. Parcel /Lot Number

2. Applicant:

Erica

a. First Name

Larner

b. Last Name

Massachusetts Department of Transportation, Highway Division

c. Organization

10 Park Plaza, Room 7360

d. Street Address

Boston

e. City/Town

MA

f. State

02116

g. Zip Code

857-268-1729

h. Phone Number

i. Fax Number

erica.n.larner@dot.state.ma.us

j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name

b. Last Name

Massachusetts Department of Transportation – Highway Division

c. Organization

10 Park Plaza

d. Street Address

Boston

e. City/Town

MA

f. State

02116

g. Zip Code

h. Phone Number

i. Fax Number

j. Email address

4. Representative (if any):

Edward

a. First Name

Hutchinson

b. Last Name

Tetra Tech

c. Company

100 Nickerson Road

d. Street Address

Marlborough

e. City/Town

MA

f. State

01752

g. Zip Code

508-786-2278

h. Phone Number

508-786-2201

i. Fax Number

ed.hutchinson@tetratech.com

j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

\$750.00

a. Total Fee Paid

\$362.50

b. State Fee Paid

\$387.50

c. City/Town Fee Paid



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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WAREHAM

City/Town

A. General Information (continued)

6. General Project Description:

Corridor Improvements (see Notice of Intent narrative).

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☐ Single Family Home	2. ☐ Residential Subdivision
3. ☐ Commercial/Industrial	4. ☐ Dock/Pier
5. ☐ Utilities	6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)	8. ☒ Transportation
9. ☐ Other	

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☒ Yes ☐ No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

310 CMR 10.53(3)(f) - 310 CMR 10.24 (7) (c) 1, Maintenance and Improvement of Existing Public Roadways

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR 10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Plymouth

a. County

2457

c. Book

b. Certificate # (if registered land)

282

d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

- ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
- ☒ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



Massachusetts Department of Environmental Protection
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WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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WAREHAM

City/Town

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet 3. cubic feet of flood storage lost	2. square feet 4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet 2. cubic feet of flood storage lost	3. cubic feet replaced
f. ☒ Riverfront Area	Stony Run (Coastal) 1. Name of Waterway (if available) - specify coastal or inland	

2. Width of Riverfront Area (check one):

- ☐ 25 ft. - Designated Densely Developed Areas only
- ☐ 100 ft. - New agricultural projects only
- ☒ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: 41,312
square feet

4. Proposed alteration of the Riverfront Area:

-1,320 (Impervious Area)
a. total square feet b. square feet within 100 ft. c. square feet between 100 ft. and 200 ft.

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☒ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☒ Yes ☐ No

3. ☒ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f.** above.



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Bureau of Resource Protection - Wetlands

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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

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WAREHAM

City/Town

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet _____ 2. cubic yards dredged _____	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet _____	2. cubic yards beach nourishment _____
e. ☐ Coastal Dunes	1. square feet _____	2. cubic yards dune nourishment _____
	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. ☐ Coastal Banks	1. linear feet _____	
g. ☐ Rocky Intertidal Shores	1. square feet _____	
h. ☐ Salt Marshes	1. square feet _____	2. sq ft restoration, rehab., creation _____
i. ☐ Land Under Salt Ponds	1. square feet _____	
	2. cubic yards dredged _____	
j. ☐ Land Containing Shellfish	1. square feet _____	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	
	1. cubic yards dredged _____	
l. ☒ Land Subject to Coastal Storm Flowage	9,670 (3,688 cf fill)	
	1. square feet _____	

4. ☐ Restoration/Enhancement

If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW _____

b. square feet of Salt Marsh _____

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings _____

b. number of replacement stream crossings _____



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C. Other Applicable Standards and Requirements

- ☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

a. ☐ Yes ☒ No

If yes, include proof of mailing or hand delivery of NOI to:

**Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581**

August 2021

b. Date of map

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

- c. Submit Supplemental Information for Endangered Species Review*

1. ☐ Percentage/acreage of property to be altered:

(a) within wetland Resource Area

percentage/acreage

(b) outside Resource Area

percentage/acreage

2. ☐ Assessor's Map or right-of-way plan of site

2. ☐ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

(a) ☐ Project description (including description of impacts outside of wetland resource area & buffer zone)

(b) ☐ Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <https://www.mass.gov/endangered-species-act-mesa-regulatory-review>).

Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



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City/Town

C. Other Applicable Standards and Requirements (cont'd)

- (c) ☐ MESA filing fee (fee information available at <https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review>).

Make check payable to "Commonwealth of Massachusetts - NHESP" and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

- (d) ☐ Vegetation cover type map of site
- (e) ☐ Project plans showing Priority & Estimated Habitat boundaries
- (f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, <https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat>; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing. a. NHESP Tracking # _____ b. Date submitted to NHESP _____

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

- a. ☐ Not applicable – project is in inland resource area only b. ☐ Yes ☒ No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: dmf.envreview-north@mass.gov

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

- c. ☐ Is this an aquaculture project? d. ☐ Yes ☐ No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).



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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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WAREHAM

City/Town

C. Other Applicable Standards and Requirements (cont'd)

Online Users:

Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
- b. ACEC
5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
a. ☐ Yes ☒ No
6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
a. ☐ Yes ☒ No
7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
a. ☒ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
2. ☒ A portion of the site constitutes redevelopment
3. ☐ Proprietary BMPs are included in the Stormwater Management System.
b. ☐ No. Check why the project is exempt:
1. ☐ Single-family house
2. ☐ Emergency road repair
3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

- ☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

WAREHAM

City/Town

D. Additional Information (cont'd)

3. ☐ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.
4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.
- MassDOT Highway Division-Marion Road (Route 6)-Wareham-100% Submission
- a. Plan Title
Tetra Tech
- b. Prepared By _____ c. Signed and Stamped by _____
- d. Final Revision Date _____ e. Scale _____
- f. Additional Plan or Document Title _____ g. Date _____
5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.
6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.
7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.
8. ☒ Attach NOI Wetland Fee Transmittal Form
9. ☒ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

197280762

2. Municipal Check Number

197280760

4. State Check Number

6. Payor name on check: First Name

12/19/2024

3. Check date

12/19/2024

5. Check date

Tetra Tech, Inc.

7. Payor name on check: Last Name



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

WAREHAM

City/Town

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant

12/17/2024

2. Date

3. Signature of Property Owner (if different)

4. Date

5. Signature of Representative (if any)

6. Date

For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:

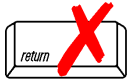
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Location of Project:

Marion Road (Route 6) and Swifts Beach Road

a. Street Address

197280760

c. Check number

Wareham

b. City/Town

\$362.50

d. Fee amount

2. Applicant Mailing Address:

Erica

a. First Name

Larner

b. Last Name

Massachusetts Department of Transportation, Highway Division

c. Organization

10 Park Plaza, Room 7360

d. Mailing Address

Boston

e. City/Town

MA

f. State

02116

g. Zip Code

857-268-1729

h. Phone Number

i. Fax Number

erica.n.larner@dot.state.ma.us

j. Email Address

3. Property Owner (if different):

a. First Name

b. Last Name

Massachusetts Department of Transportation-Highway Division

c. Organization

10 Park Plaza

d. Mailing Address

Boston

e. City/Town

MA

f. State

02116

g. Zip Code

h. Phone Number

i. Fax Number

j. Email Address

B. Fees

Fee should be calculated using the following process & worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Cat. 2d - Limited Project	1	\$500.00	\$500.00
In Riverfront Area (X 1.5)			\$750.00
Step 5/Total Project Fee:			\$750.00

Step 6/Fee Payments:

Total Project Fee:	\$750.00
	a. Total Fee from Step 5
State share of filing Fee:	\$362.50
	b. 1/2 Total Fee less \$12.50
City/Town share of filing Fee:	\$387.50
	c. 1/2 Total Fee plus \$12.50

C. Submittal Requirements

- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

THE FACE OF THIS DOCUMENT CONTAINS A VOID PANTOGRAPH AND MICROPRINTING



TETRA TECH, INC
3475 E. Foothill Blvd.
Pasadena CA 91107-6024
TETRA TECH 626.351.4664

WELLS FARGO BANK, N.A.
Positive Pay Protected

197280760

56-382/412

DATE 12/19/2024

Pay Three Hundred Sixty-two And 50/100 Dollars

****\$362.50

TO
THE
ORDER
OF

COMMONWEALTH OF MASSACHUSETTS
DEPT OF ENVIRONMENTAL PROTECTION
BOX 4062
BOSTON, MA 02211

Stan Pauling
VOID AFTER 90 DAYS
[Signature]

⑈ 197280760⑈ ⑆041203824⑆9600048505⑈

THE FACE OF THIS DOCUMENT CONTAINS A VOID PANTOGRAPH AND MICROPRINTING



TETRA TECH, INC
3475 E. Foothill Blvd.
Pasadena CA 91107-6024
TETRA TECH 626.351.4664

WELLS FARGO BANK, N.A.
Positive Pay Protected

197280762

56-382/412

DATE 12/19/2024

Pay Three Hundred Eighty-seven And 50/100 Dollars

****\$387.50

TO
THE
ORDER
OF

TOWN OF WAREHAM
54 MARION RD
WAREHAM, MA 02571

Stan Pauling
VOID AFTER 90 DAYS
[Signature]

⑈ 197280762⑈ ⑆041203824⑆9600048505⑈

**Notice of Intent
Corridor Improvements
Route 6 and Swifts Beach Road, Wareham, Massachusetts
MassDOT Project Number: 610647**

1.0 INTRODUCTION

This Notice of Intent (NOI) is being submitted by the Massachusetts Department of Transportation, Highway Division (MassDOT) pursuant to the Massachusetts Wetlands Protection Act (MAWPA; MGL Ch. 131, s. 40) and Regulations (310 CMR 10.00 et seq.) for corridor improvements on Route 6 and Swifts Beach Road in Wareham, Massachusetts. The project location has been identified by the Town of Wareham as experiencing increased frequency of vehicular and pedestrian crashes. The Route 6 Corridor Study performed by the Southeastern Regional Planning and Economic Development District (SRPEDD) also identified the need for improved pedestrian and bicycle infrastructure along the corridor.

The existing four-lane roadway in the project area will be reconstructed with one travel lane in each direction with a 5 ½ -foot-wide sidewalk on the north side of the roadway and a 5-foot-wide grassed buffer and a ten-foot-wide shared use path on the south side of the roadway. Because of the removal of one travel lane in each direction, also known as a Road Diet, the proposed project will reduce impervious area within Land Subject to Coastal Storm Flowage (LSCSF) by 1,320 square feet (sf). While there will be a reduction in impervious area within LSCSF, the project will fill an area of approximately 9,670 sf within LSCSF with approximately 3,688 cubic feet (cf) for corridor improvements. There is no regulatory requirement for compensatory flood storage in a coastal environment. There are no performance standards for Land Subject to Coastal Storm Flowage. The proposed project will also reduce impervious area within the Riverfront Area by 1,320 sf.

Portions of the Project within the Buffer Zone and Riverfront Area and outside any areas specified in 310 CMR 10.02(1)(a) through (e) qualify as a minor activity in the Buffer Zone/Riverfront Area and are not otherwise subject to regulation under the MAWPA. These minor activities include the conversion of impervious to vegetated surfaces (310 CMR 10.02(2)(b)2f), pavement repair, resurfacing, and reclamation of existing roadways (310 CMR 10.02(2)(b)2p), and vegetation cutting for road safety maintenance (310 CMR 10.02(2)(b)2n).

Additionally, the Project work within the Riverfront Area that is not exempt qualifies as a “limited project” under the Wetlands Protection Act Regulations (310 CMR 10.53(3)(f)) for maintenance and improvement of existing public roadways, including widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems. Project work within Land Subject to Coastal Storm Flowage also qualifies as a “limited project” under the Wetlands Protection Act Regulations (310 CMR 10.24(7)(c)1) for maintenance and improvement of existing public roadways, including widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems.

There is no in-water work proposed as part of this project. The project is not subject to permitting under Sections 401 or 404 of the Clean Water Act. The project does not meet any Massachusetts Environmental Policy Act (MEPA) Review Thresholds for a mandatory Environmental Impact Report (EIR) or an Environmental Notification Form (ENF). There are no Outstanding Resource Waters (ORWs), Areas of Critical Environmental Concern (ACECs), or Massachusetts Natural Heritage and Endangered Species Program (MA NHESP) designated endangered species habitat or certified/potential vernal pools within the project area.

The project does not require a Chapter 91 license or permit. As described in the Waterways Regulations at 310 CMR 9.05(3), no license or permit is required for:

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(a) maintenance, repair, and minor modifications, as described in 310 CMR 9.22, of fill or structures for which a grant or license is presently valid, or which is exempt from licensing pursuant to 310 CMR 9.05(3)(b) through (h); and

(c) continuation of any existing, unauthorized public service project, provided that no unauthorized structural alteration or change in use has occurred subsequent to January 1, 1984, unless the Department determines, upon notice and opportunity for public comment, that licensing is essential to prevent significant harm to an overriding water related public interest.

Stony Run is a tidal waterway. In tidal waters, U.S. Army Corps of Engineers' (USACE) jurisdiction includes all work in, over, and under the waterway, so this project could potentially be considered work over a tidal waterway under Section 10 of the Rivers and Harbors Act. Email correspondence from USACE indicates that the intent of that language was to protect navigation. As a minor repair project with no real impact on the stream, no in-water work, and no impact on navigation, it is the opinion of USACE that no permit would be required for this work.

A site location map is included as Figure 1 and an aerial photograph of the project area is included as Figure 2.

2.0 SITE DESCRIPTION

Project limits extend from approximately 100 feet east of the intersection of Marion Road (Route 6) and Cromesett Road heading in an easterly direction to the intersection of Marion Road and Viking Drive (Figure 1). Marion Road is an urban minor arterial with two travel lanes in each direction for much of the project length. Beginning at Gibbs Avenue, near the eastern limit of work, Marion Road has one travel lane in each direction. Route 6, which is not a National Highway System (NHS) roadway, has an ADT of 14,600 vehicles per day with 1% comprised of trucks.

Marion Road runs in a southwest to northeast direction, is maintained by MassDOT, and is eligible for federal aid funding for improvements based on MassDOT's Roadway Inventory Files. Marion Road is approximately 40 feet wide with lane widths measuring approximately 9 ½ to 10 ½ feet and shoulder widths of approximately 1 foot. Directional flow is divided by double yellow line pavement markings and travel lanes are divided by white dashed pavement markings. There are sidewalks on both sides of the road but there are no crosswalks at the Swifts Beach Road intersection, although one is located approximately 95 feet to the east of Swifts Beach Road. Marion Road serves a gas station, and residential properties at this intersection.

The project is in a developed suburban area with existing right-of-way at or close to the back of existing sidewalks. The adjacent properties are predominantly residential with some commercial and retail parcels.

Stony Run is a tidal waterway that runs approximately north to south in the central portion of the Project Area. Wetland Resource Areas associated with Stony Run within the project limits include Bank, Land Under the Ocean, Land Subject to Coastal Storm Flowage, and Riverfront Area. An area of Bordering Vegetated Wetland (BVW) associated with Stony Run is located north of and outside the project limits. The 100-foot buffer zone of this BVW is located within the project limits.

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3.0 PROJECT DESCRIPTION

The proposed project is approximately 3,950 feet in length beginning approximately 100 feet east of the intersection of Marion Road (Route 6) and Cromesett Road and extends in an easterly direction to end at the intersection of Marion Road and Viking Drive. The proposed project includes two 11-foot-wide travel lanes, a 10-foot-wide left turn lane, 5-foot-wide shoulders, a 5 ½ -foot-wide sidewalk on the north side of the roadway and a 5-foot-wide grassed buffer and a ten-foot-wide shared use path on the south side of the roadway. The existing four-lane roadway will be reconstructed with one travel lane in each direction to reduce speeds and provide space for left turn lanes at intersections, adequate shoulders, and bicycle and pedestrian improvements throughout the corridor. In addition to the Road Diet, the project will also include reconstruction of the existing traffic signal at the intersection of Route 6 and Wareham Plaza and construction of a new traffic signal at the intersection of Route 6 and Swifts Beach Road.

Corridor improvements also include, in addition to the shared-use path, construction of ADA compliant sidewalks and wheelchair ramps, driveway reconstruction and access management, milling and resurfacing Marion Road and intersecting side street approaches, traffic control signing improvements, pavement markings, and tree trimming on the north side of Route 6, on the east and west sides of Stony Run, and on the south side of Route 6, east of Stony Run, for road safety maintenance. The project will retain the existing roadway profile and cross section slopes that include superelevated sections.

Project Plans are included in Appendix A.

4.0 RESOURCE AREAS

4.1 BANK

Under 310 CMR 10.54, a Bank is the portion of the land surface which normally abuts and confines a water body. It occurs between a water body and a vegetated bordering wetland and adjacent floodplain, or, in the absence of these, it occurs between a water body and an upland.

The Bank of Stony Run consists of a wooded area dominated by red maple (*Acer rubrum*) and is identified by flag numbers SL200-SL207 (west bank) and SL100-SL112 (east bank). Stony Run is located at Station 27 + 60 as shown on the Project Plans in Appendix A. The land surface that abuts and confines Stony Run, which flows under Route 6 in the central portion of the Project Area, is considered the Wetland Resource Area, Bank.

4.2 BORDERING VEGETATED WETLAND

Under 310 CMR 10.55(2)(a), Bordering Vegetated Wetlands (BVW) are freshwater wetlands which border on creeks, rivers, streams, ponds, and lakes. Bordering Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants.

An area of BVW associated with Stony Run is located north of and outside the project limits. The boundary of this BVW was approximated using the MassGIS DEP Wetlands layer and desktop analysis. The 100-foot buffer zone of this BVW is located within the project limits.

4.3 LAND UNDER THE OCEAN

Under 310 CMR 10.25 (2), Land Under the Ocean means land extending from the mean low water line seaward to the boundary of the municipality's jurisdiction and includes land under estuaries. Land Under the Ocean includes land under bays, estuaries and under portions of rivers which are tidally influenced, as well as land under the open ocean out to the municipality's boundary.

The land beneath Stony Run, a perennial tidal waterway that flows north to south in the central portion of the Project Area, is considered the Wetland Resource Area, Land Under the Ocean (LUO).

4.4 LAND SUBJECT TO COASTAL STORM FLOWAGE

Land Subject to Coastal Storm Flowage means land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, whichever is greater. A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the Project area (Map No. 25023C0488K, July 6, 2021) (Figure 3) indicated that the portion of the Project Area where the coastal floodplain intersects Route 6 in the vicinity of Stony Run is located within the 100-year floodplain (Land Subject to Coastal Storm Flowage (LSCSF)).

4.5 RIVERFRONT AREA

Under 310 CMR 10.58, the Riverfront Area is the area of land between a river's mean annual high-water (MAHW) line measured horizontally outward from the river and a parallel line located 200 feet away. The land area within 200 feet of the MAHW line of Stony Run is considered Riverfront Area.

The Riverfront Area associated with Stony Run is located in the central portion of the Project Area. The limit of the Riverfront Area is based on the MAHW line of Stony Run and extends 200 feet from Stony Run on both sides. The Riverfront Area within the limit of work is comprised of roadway right-of-way including roadway pavement and sidewalk. The majority of the Riverfront Area within the limit of work is degraded where it is void of vegetation and contains roadway pavement and sidewalk.

Wetland Resource Areas are shown on the Project Plans in Appendix A.

4.6 OTHER RESOURCE AREAS

The Massachusetts Natural Heritage and Endangered Species Program (NHESP) Natural Heritage Data Layer (MassGIS, 2021) indicates that there is no Priority or Estimated Habitat within the project area, nor are there any certified or potential vernal pools within the project limits. The project is also not within any Areas of Critical Environmental Concern (ACECs), nor is the Project located within an Outstanding Resource Water (ORW). Figure 4 shows the Natural Heritage Database information.

The project is located within the Coastal Zone of Massachusetts and in Coastal Zone Management (CZM) jurisdiction in accordance with 301 CMR 21.99. The designated Coastal Zone extends seaward from the coastline out to three miles and landward to 100 feet inland of specified roads and railroads. Projects that do not exceed any thresholds for the preparation of an Environmental Notification Form (ENF), in accordance with the Massachusetts Environmental Policy Act (MEPA), can be assumed to be in compliance with the Massachusetts Coastal Zone Management Plan. MassDOT Environmental has coordinated with CZM and received concurrence that the project does not exceed any thresholds for the

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preparation of an ENF, in accordance with MEPA, and is therefore in compliance with the Massachusetts Coastal Zone Management Plan.

5.0 IMPACTS

5.1 BANK

The proposed project will have no impact on the Massachusetts State Wetland Resource Area of Bank. A portion of the work will occur within the 100-foot buffer zone of Bank on the north side of Route 6 on the east side of Stony Run, and beyond the limit of LSCSF. This work includes corridor improvements and tree trimming, both considered minor activities in the buffer zone and not otherwise subject to regulation under the MAWPA. These minor activities include the conversion of impervious to vegetated surfaces (310 CMR 10.02(2)(b)2f), pavement repair, resurfacing, and reclamation of existing roadways (310 CMR 10.02(2)(b)2p), and vegetation cutting for road safety maintenance (310 CMR 10.02(2)(b)2n).

5.2 BORDERING VEGETATED WETLAND

The proposed project will have no impact on BVW. A portion of the work will occur within the 100-foot buffer zone of BVW on the north side of Route 6 on the east side of Stony Run. This work includes corridor improvements and tree trimming, both considered minor activities in the buffer zone and not otherwise subject to regulation under the MAWPA. These minor activities include the conversion of impervious to vegetated surfaces (310 CMR 10.02(2)(b)2f), pavement repair, resurfacing, and reclamation of existing roadways (310 CMR 10.02(2)(b)2p), and vegetation cutting for road safety maintenance (310 CMR 10.02(2)(b)2n).

5.3 LAND UNDER THE OCEAN

There will be no in-water work and no debris in water associated with this work. The proposed project will have no impact on the Massachusetts State Wetland Resource Area of Land Under the Ocean.

5.4 LAND SUBJECT TO COASTAL STORM FLOWAGE

The floodplain associated with Stony Run is regulated as Land Subject to Coastal Storm Flowage (LSCSF) under the Massachusetts Wetlands Protection Act. Project work within LSCSF includes the reconstruction of the existing four-lane roadway with one travel lane in each direction along with a 5 ½ - foot-wide sidewalk on the north side of the roadway and a 5-foot-wide grassed buffer and a ten-foot-wide shared use path on the south side of the roadway. Work within LSCSF also includes tree trimming on the north side of Route 6, on the east and west sides of Stony Run, and on the south side of Route 6, east of Stony Run, for road safety maintenance.

Because of the Road Diet, the proposed project will reduce impervious area within LSCSF by 1,320 sf, which is an 8.5% reduction of impervious area within the coastal floodplain.

While there will be a reduction in impervious area within LSCSF, the project will fill an area of approximately 9,670 sf within LSCSF with approximately 3,688 cf for corridor improvements.

There is no regulatory requirement for compensatory flood storage in a coastal environment.

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There are no performance standards for Land Subject to Coastal Storm Flowage (LSCSF).

In addition, the Project qualifies as a “limited project” under the Wetlands Protection Act Regulations (310 CMR 10.24(7)(c)1) for maintenance and improvement of existing public roadways, including widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems.

5.5 RIVERFRONT AREA

The Riverfront Area associated with Stony Run is located in the central portion of the Project Area. The limit of the Riverfront Area is based on the MAHW line of Stony Run and extends 200 feet from Stony Run on both sides. The Riverfront Area within the limit of work is comprised of roadway right-of-way including roadway pavement and sidewalk. The majority of the Riverfront Area within the limit of work is degraded where it is void of vegetation and contains roadway pavement and sidewalk.

5.5.1 Re-development/Minor Activities

The Riverfront Area within the project area consists of approximately 41,312 square feet (sf) with approximately 37,126 sf of previously disturbed and currently developed/degraded area, and as such, the project qualifies as a re-development project under 310 CMR 10.58 (5).

In addition, a portion of the Project within the Riverfront Area (approximately 22,838 sf) also qualifies as a minor activity in the Buffer Zone/Riverfront Area. Under 310 CMR 10.02(2)(b)1/310 CMR 10.58(6)(b), minor activities, as described in 310 CMR 10.02(2)(b)2, within the buffer zone and outside any areas specified in 310 CMR 10.02(1)(a) through (e) are not otherwise subject to regulation under the MAWPA.

Minor activities applicable to the proposed project include:

- The conversion of impervious to vegetated surfaces, provided erosion and sedimentation controls are implemented during construction (310 CMR 10.02(2)(b)2f).
- Pavement repair, resurfacing, and reclamation of existing roadways within the right-of-way configuration (310 CMR 10.02(2)(b)2p).
- Vegetation cutting for road safety maintenance (310 CMR 10.02(2)(b)2n).

As shown on Sheet 7 of the Project Plans (Appendix A), a portion of the work within Riverfront Area is also located within Land Subject to Coastal Storm Flowage (approximately 18,474 sf) and therefore, cannot be considered a minor activity within the Buffer Zone/Riverfront Area because the work is also proposed within LSCSF. The remaining work within the Riverfront Area that extends beyond LSCSF (approximately 22,838 sf) does qualify as a minor activity in the Buffer Zone/Riverfront Area, as it is solely located within Riverfront Area, and is not otherwise subject to regulation under the MAWPA. This includes conversion of approximately 1,194 sf of impervious surface to vegetated surface and pavement repair, resurfacing, and reclamation of approximately 20,375 sf of existing roadways.

The Project area within Riverfront Area and LSCSF (approximately 18,474 sf) qualifies as a re-development project under 310 CMR 10.58 (5) as approximately 15,557 sf are currently occupied by impervious surfaces. The re-development provisions of the Riverfront Area regulations allow re-development to occur as long as the site-wide percent of degraded area does not exceed the existing amount of degraded area or 10 percent of the total Riverfront Area on the site, whichever is greater. The

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regulations also require that the proposed work improve existing conditions, provide stormwater management in accordance with DEP policy, and is not closer to the river than existing conditions.

The total Riverfront Area on site is approximately 41,312 sf. Of this, approximately 37,126 sf or 89 percent is degraded (the Project area within Riverfront Area and LSCSF is approximately 18,474 sf and of this, 15,557 sf or 84 percent is degraded), so existing degraded conditions already exceed 10 percent of the total Riverfront Area. The regulations allow re-development to occur as long as the site-wide percent of degraded area does not exceed the existing amount of degraded area or, in this case, 89 (84) percent. Because of the Road Diet, the proposed project will reduce impervious area within the Riverfront Area by 1,320 sf, which will improve existing conditions. The proposed work will provide stormwater management in accordance with DEP policy, which will also improve existing conditions. In addition, the proposed work is not closer to the river than existing conditions.

Additionally, the Project qualifies as a “limited project” under the Wetlands Protection Act Regulations (310 CMR 10.53(3)(f)) for maintenance and improvement of existing public roadways, including widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems.

5.5.2 Riverfront Area Performance Standards

As described above, the project is a re-development project and is only required to comply with the re-development standards under 310 CMR 10.58 (5); however, as outlined below, the project has complied, as practicable, with the Riverfront Area performance standards under section 10.58 (4) of the Riverfront Protection Regulations.

Protection of Other Resource Areas: The proposed project will not involve impacts to Bank, Bordering Vegetated Wetland, or Land Under the Ocean. In addition, there is no regulatory requirement for compensatory flood storage in a coastal environment. There are no performance standards for Land Subject to Coastal Storm Flowage (LSCSF).

Protection of Rare Species: There are no rare wetland wildlife habitats, rare species habitat, or exemplary natural communities on the Site. The proposed project will not impair the capacity of the Riverfront Area to provide important wildlife habitat functions. More than 50 percent of the Riverfront Area on site currently consists of paved roadway with limited wildlife value. The project will not adversely affect habitat of wetland or upland vertebrate or invertebrate species.

No Significant Adverse Impact: The Project meets the criteria for no significant adverse impact to Riverfront Area. Because of the Road Diet, the proposed project will reduce impervious area within the Riverfront Area by 1,320 sf. Minor activities in the Riverfront Area not otherwise subject to regulation under the MAWPA will reduce impervious area within the Riverfront Area by an additional 1,194 sf. The proposed project will not impair the capacity of the Riverfront Area to provide important wildlife habitat functions.

In addition, the Project qualifies as a “limited project” under the Wetlands Protection Act Regulations (310 CMR 10.53(3)(f)) for maintenance and improvement of existing public roadways, including widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems.

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6.0 STORMWATER MANAGEMENT

The work is subject to the Massachusetts Wetlands Protection Act, including the Stormwater Management Standards, due to work within Riverfront Area and LSCSF. It qualifies as a limited project per 310 CMR 10.53(3)(f) and 310 CMR 10.24(7)(c)1, maintenance and improvement of existing public roadways, including widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems. It is considered a re-development project, therefore in accordance with the Massachusetts Stormwater Management Standards, it is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5 and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable.

The goal of the performance standards in the Wetlands Protection Act is to maintain post-development runoff characteristics as equal to or less than pre-development runoff characteristics. The nature of this Project ensures that this goal will be met.

Existing outfalls will be maintained. Impervious area will be decreased by 3.0% in the overall project area and will decrease by 6.8% within the 200-foot Riverfront Area. Deep sump catch basins are proposed where new catch basins are warranted due to realignment of the curb line.

The Stormwater Management Checklist is included in Appendix B. The Project meets the requirements of the Stormwater Management Standards to the maximum extent practicable.

7.0 CONSTRUCTION MITIGATION

Construction term mitigation will be provided through the implementation of structural and non-structural best management practices and sediment and erosion controls. Prior to work commencing on the site, there will be a pre-construction conference with the contractor to review sediment control practices to be installed prior to the start of earth disturbing activities. At a minimum, best management practices will be employed to minimize exposed soils and discharges of construction term sediment laden runoff as follows:

- Compost filter tubes or equivalent will be placed to limit the migration of sediment laden runoff into the wetland resource areas.
- Geotextile inlet protection will be installed within the catch basins in the project area to limit the migration of sediment laden runoff into the wetland resource areas.
- During construction, disturbed areas will be kept to a minimum and vegetative stabilization of these areas will occur as soon as practicable.
- Erosion control measures may include temporary seeding, mulching, or other suitable stabilization measures used to protect exposed areas until final loaming and seeding occurs. Seeding and mulch rates and types will be per MassDOT specifications and included in the contract documents.

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8.0 CONCLUSION

The proposed project includes two 11-foot-wide travel lanes, a 10-foot-wide left turn lane, 5-foot-wide shoulders, a 5 ½ -foot-wide sidewalk on the north side of the roadway and a 5-foot-wide grassed buffer and a ten-foot-wide shared use path on the south side of the roadway. The existing four-lane roadway will be reconstructed with one travel lane in each direction to reduce speeds and provide space for left turn lanes at intersections, adequate shoulders, and bicycle and pedestrian improvements throughout the corridor. In addition to the Road Diet, the project will also include reconstruction of the existing traffic signal at the intersection of Route 6 and Wareham Plaza and construction of a new traffic signal at the intersection of Route 6 and Swifts Beach Road.

Corridor improvements also include, in addition to the shared-use path, construction of ADA compliant sidewalks and wheelchair ramps, driveway reconstruction and access management, milling and resurfacing Marion Road and intersecting side street approaches, traffic control signing improvements, pavement markings, and tree trimming on the north side of Route 6, on the east and west sides of Stony Run for road safety maintenance.

Portions of the Project qualify as minor activities in the Buffer Zone/Riverfront Area under 310 CMR 10.02(2)(b)2/310 CMR 10.58(6)(b) including,

The conversion of impervious to vegetated surfaces, provided erosion and sedimentation controls are implemented during construction (310 CMR 10.02(2)(b)2f),

Pavement repair, resurfacing, and reclamation of existing roadways within the right-of-way configuration (310 CMR 10.02(2)(b)2p), and

Vegetation cutting for road safety maintenance (310 CMR 10.02(2)(b)2n).

The Project qualifies as a “limited project” under the Wetlands Protection Act Regulations (310 CMR 10.53(3)(f) and 310 CMR 10.24(7)(c)1) for maintenance and improvement of existing public roadways, including widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems.

The project complies, as practicable, with the re-development provisions of the Riverfront Area regulations (310 CMR 10.58 (5)) and as practicable with the Riverfront Area performance standards under section 10.58 (4) of the Riverfront Protection Regulations.

The proposed work will provide stormwater management in accordance with DEP policy, which will improve existing conditions. In addition, the proposed work is not closer to the river than existing conditions. Because of the Road Diet, the proposed project will reduce impervious area within the Riverfront Area by 1,320 sf, which will also improve existing conditions. Minor activities in the Riverfront Area not otherwise subject to regulation under the MAWPA will reduce impervious area within the Riverfront Area by an additional 1,194 sf.

The proposed project will not involve impacts to Bank, Bordering Vegetated Wetland, or Land Under the Ocean. In addition, the project will reduce impervious area within Land Subject to Coastal Storm Flowage (LSCSF) by 1,320 sf. The project will not adversely affect habitat of wetland or upland vertebrate or invertebrate species. The Project meets the criteria for no significant adverse impact to Riverfront Area,

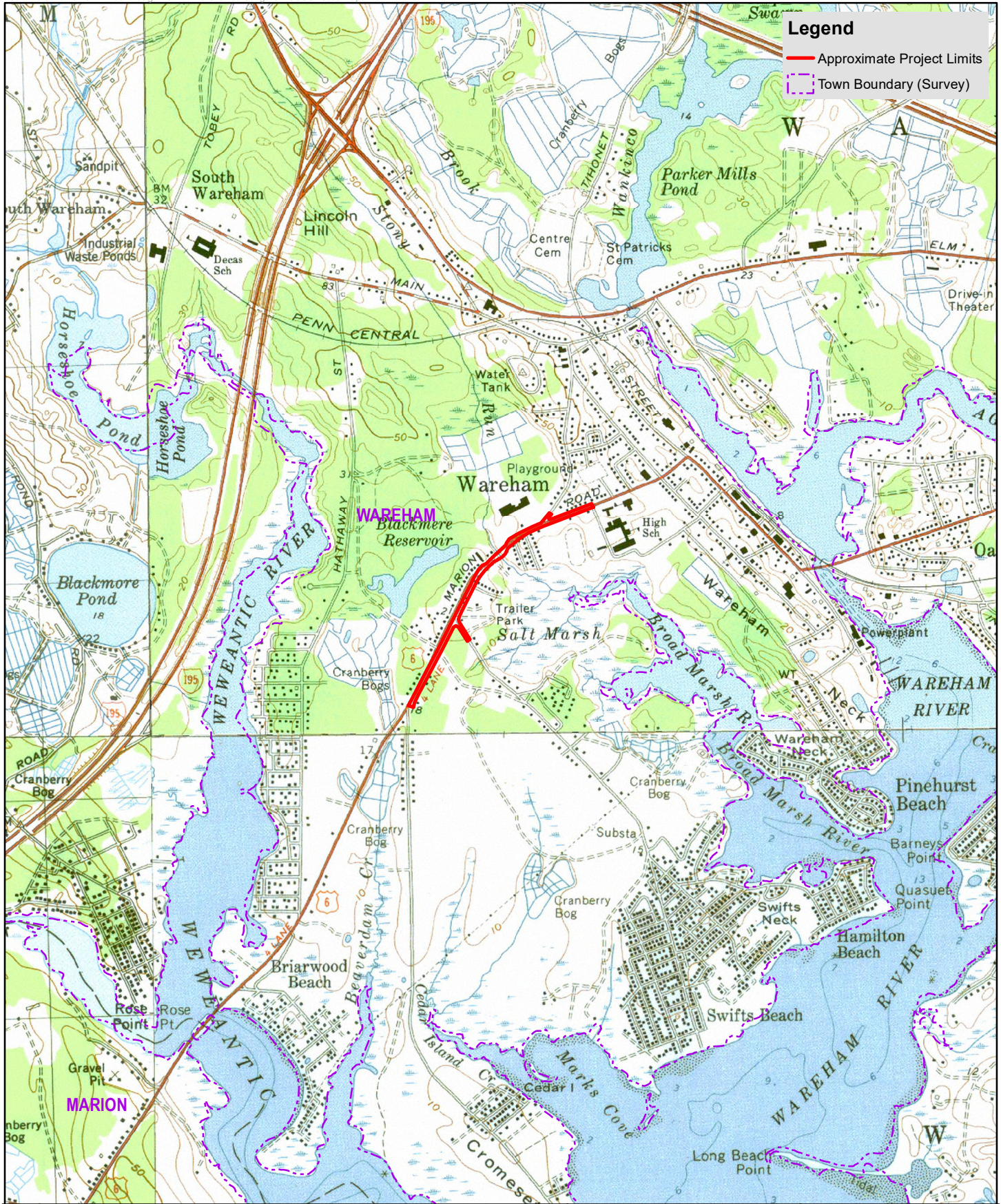
Notice of Intent
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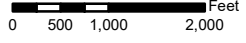
and the proposed project will not impair the capacity of the Riverfront Area to provide important wildlife habitat functions.

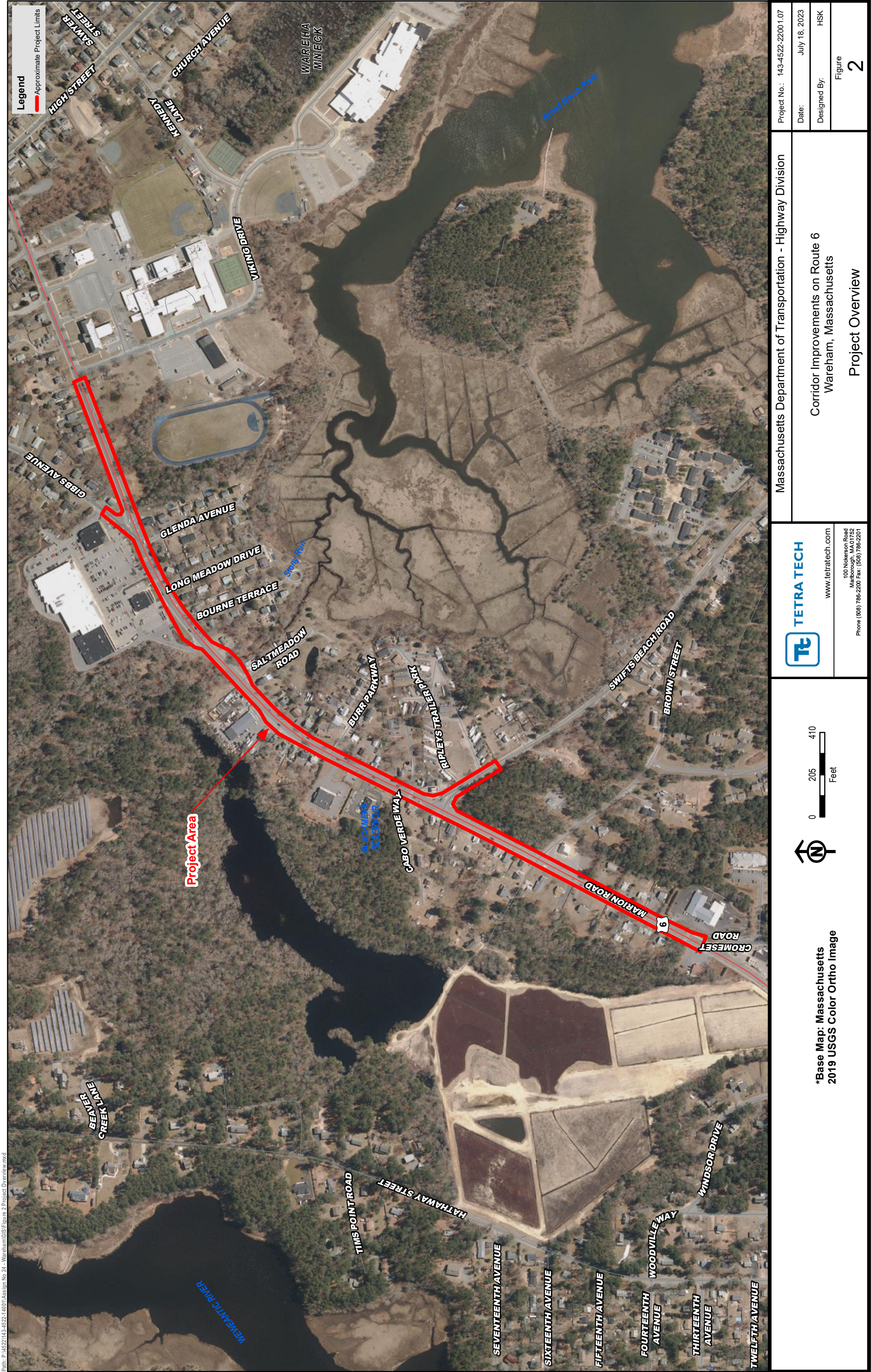
Mitigation measures will be put in place to protect the resource areas in the vicinity of the project. Overall, the project will result in a significant environmental benefit, a reduction in vehicular and pedestrian accidents, and improvements to bicycle and pedestrian accommodation. MassDOT respectfully requests that the Wareham Conservation Commission find that these measures protect and promote the interests of the MAWPA and issue an Order of Conditions approving the work described in this NOI.

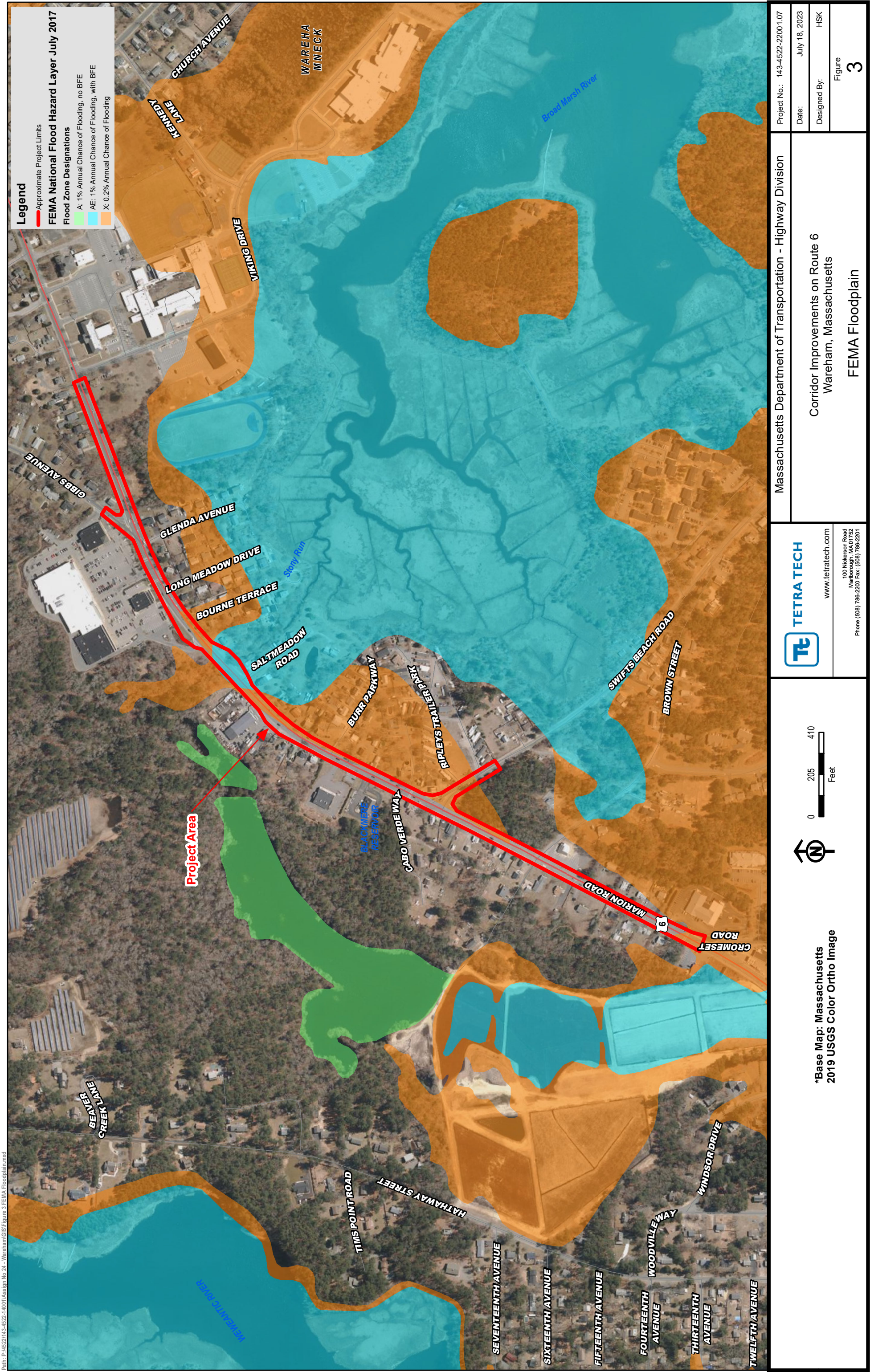
Figures

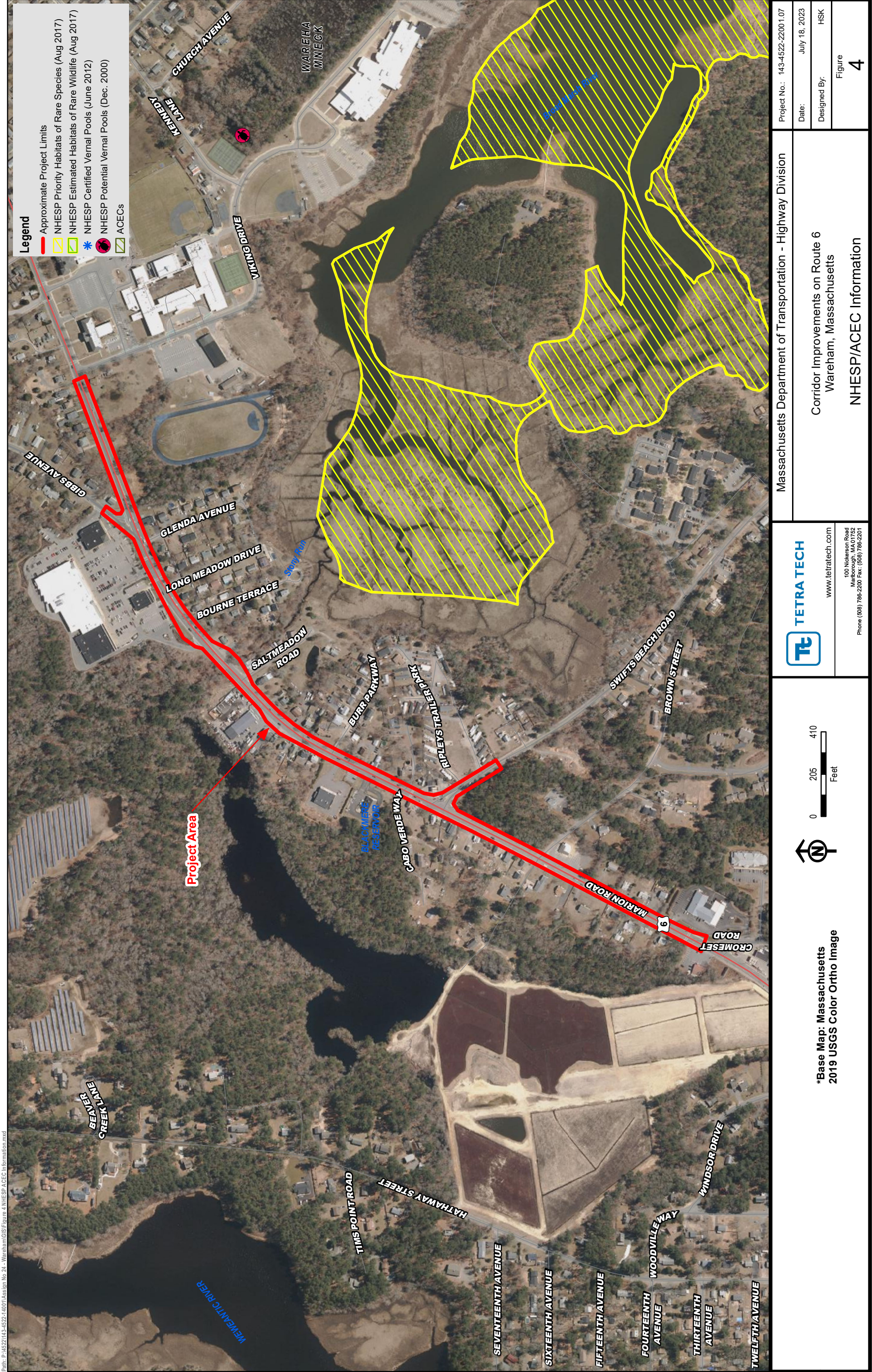
Date: 7/18/2023
 Path: P:\4522\143-4522-14001\Assign No 24 - Wareham\GIS\Figure 1 USGS Locus Map.mxd



 TETRA TECH www.tetrattech.com 100 Nickerson Road Marlborough, MA 01752 Phone (508) 786-2200 Fax: (508) 786-2201	 Base Map: ESRI GIS, USGS 	Massachusetts Department of Transportation - Highway Division Corridor Improvements on Route 6 Wareham, Massachusetts USGS Locus Map	Project No.: 143-4522-22001.07 Date: July 18, 2023 Designed By: HSK Figure 1







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*Base Map: Massachusetts
2019 USGS Color Ortho Image

Appendix A

Project Plans

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION

HIGHWAY DIVISION

PLAN AND PROFILE OF

MARION ROAD

(ROUTE 6)

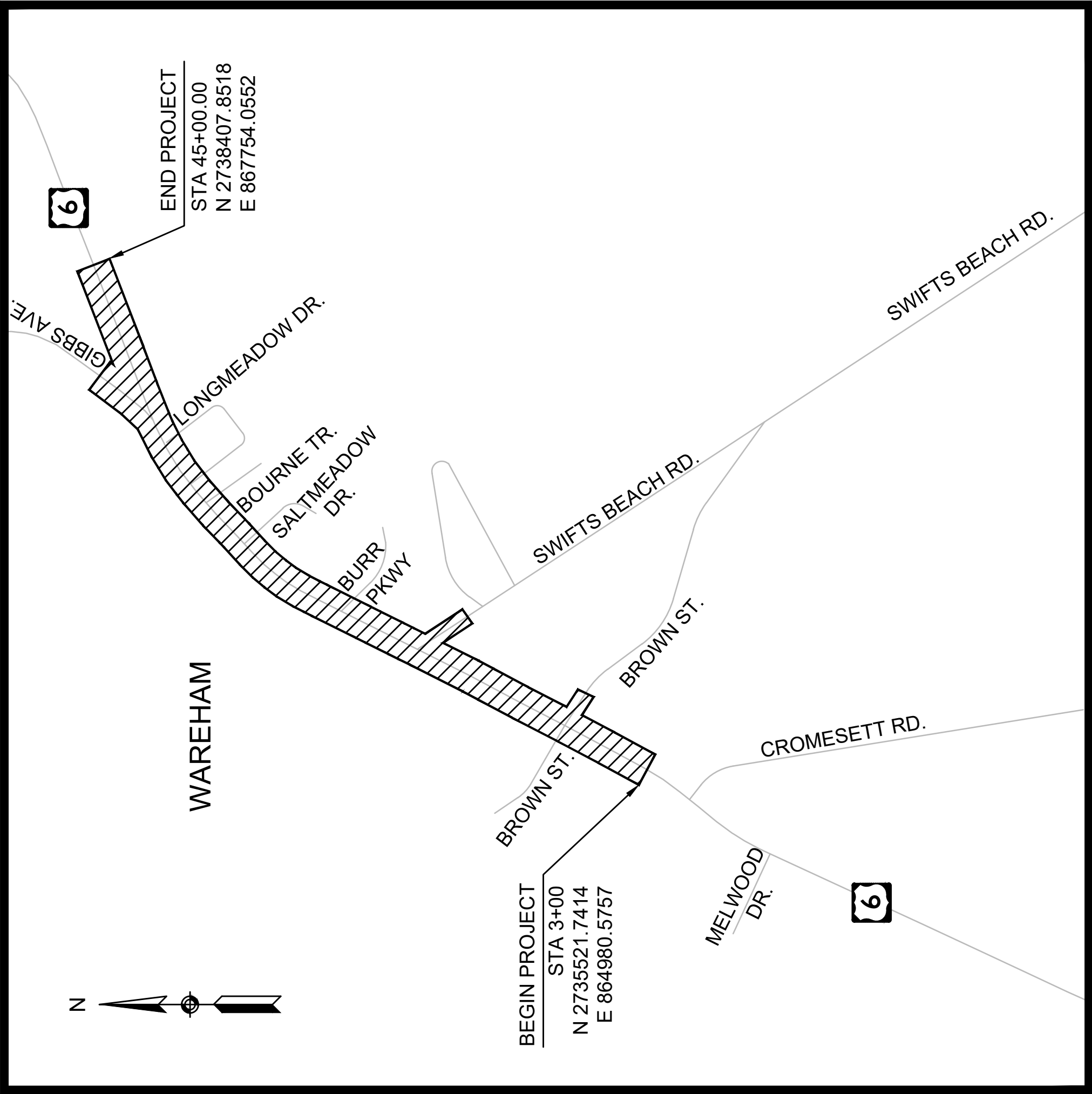
IN THE TOWN OF

WAREHAM

PLYMOUTH COUNTY

FEDERAL AID PROJECT NO.

100% SUBMISSION



LENGTH OF PROJECT = 4,200 FEET = 0.795 MILES

INDEX

SHEET NO.	DESCRIPTION
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WAREHAM
MARION ROAD (ROUTE 6)

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	1	129
PROJECT FILE NO.		610647	

TITLE SHEET & INDEX

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2023 STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1988 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

DESIGN DESIGNATION

DESIGN SPEED	40 MPH
ADT (2020)	13,859
ADT (2030)	15,314
K	9.9%
D	53.0%
T (PEAK HOUR)	4.5%
T (AVERAGE DAY)	3.0%
DHV (2030)	1,520
DDVH (2030)	450
FUNCTIONAL CLASSIFICATION	URBAN MINOR ARTERIAL

07/21/2023	75% DESIGN SUBMISSION	2	
08/05/2022	25% DESIGN SUBMISSION REV 1	1	
02/02/2022	25% DESIGN SUBMISSION	0	
DATE	DESCRIPTION	REV #	



APPROVED



100 Nickerson Road
Marlborough, MA 01752
508.786.2200
www.tetrattech.com

CHIEF ENGINEER

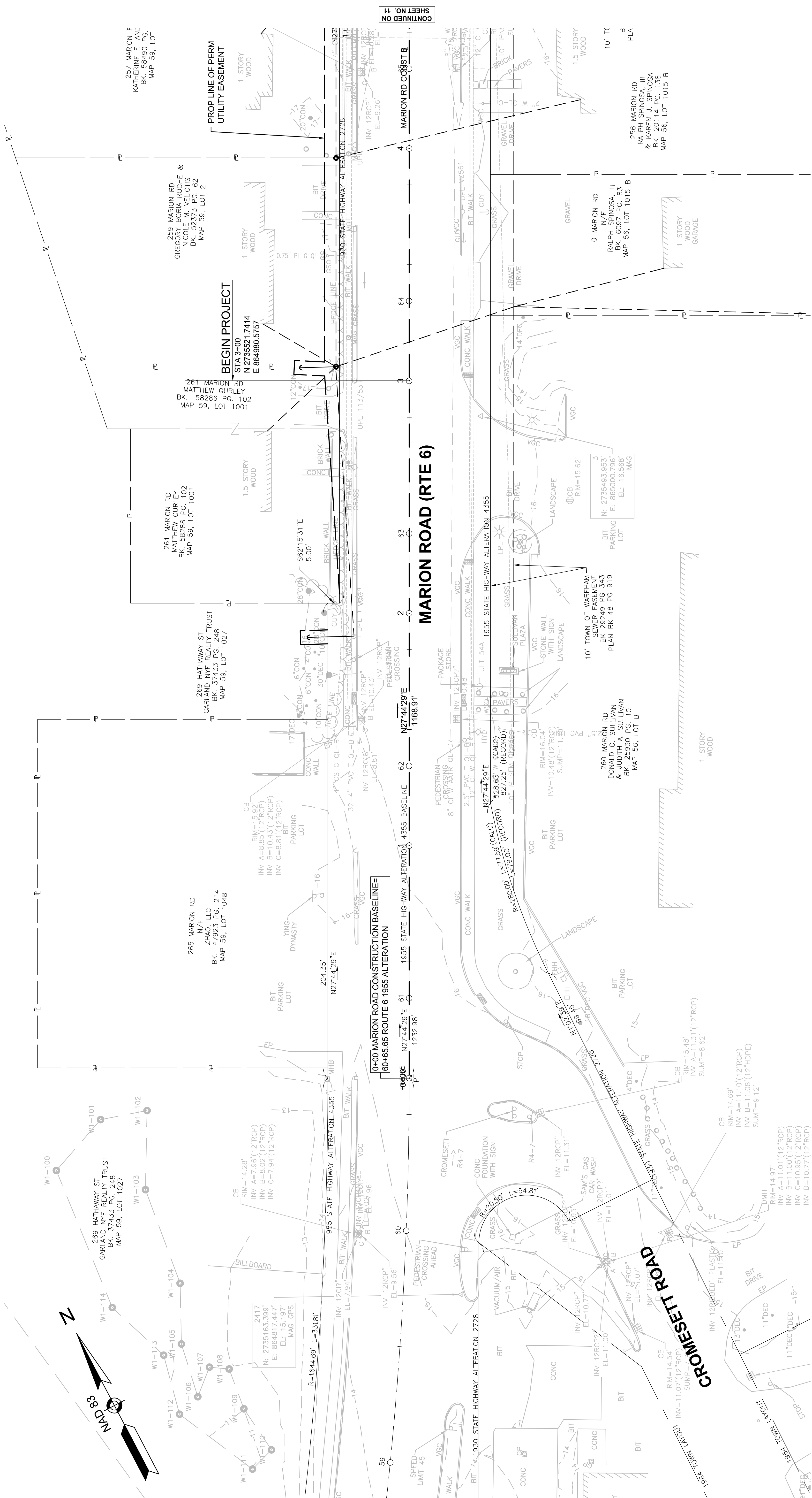
DATE

WAREHAM MARION ROAD (ROUTE 6)			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	10	128
PROJECT FILE NO.			610647

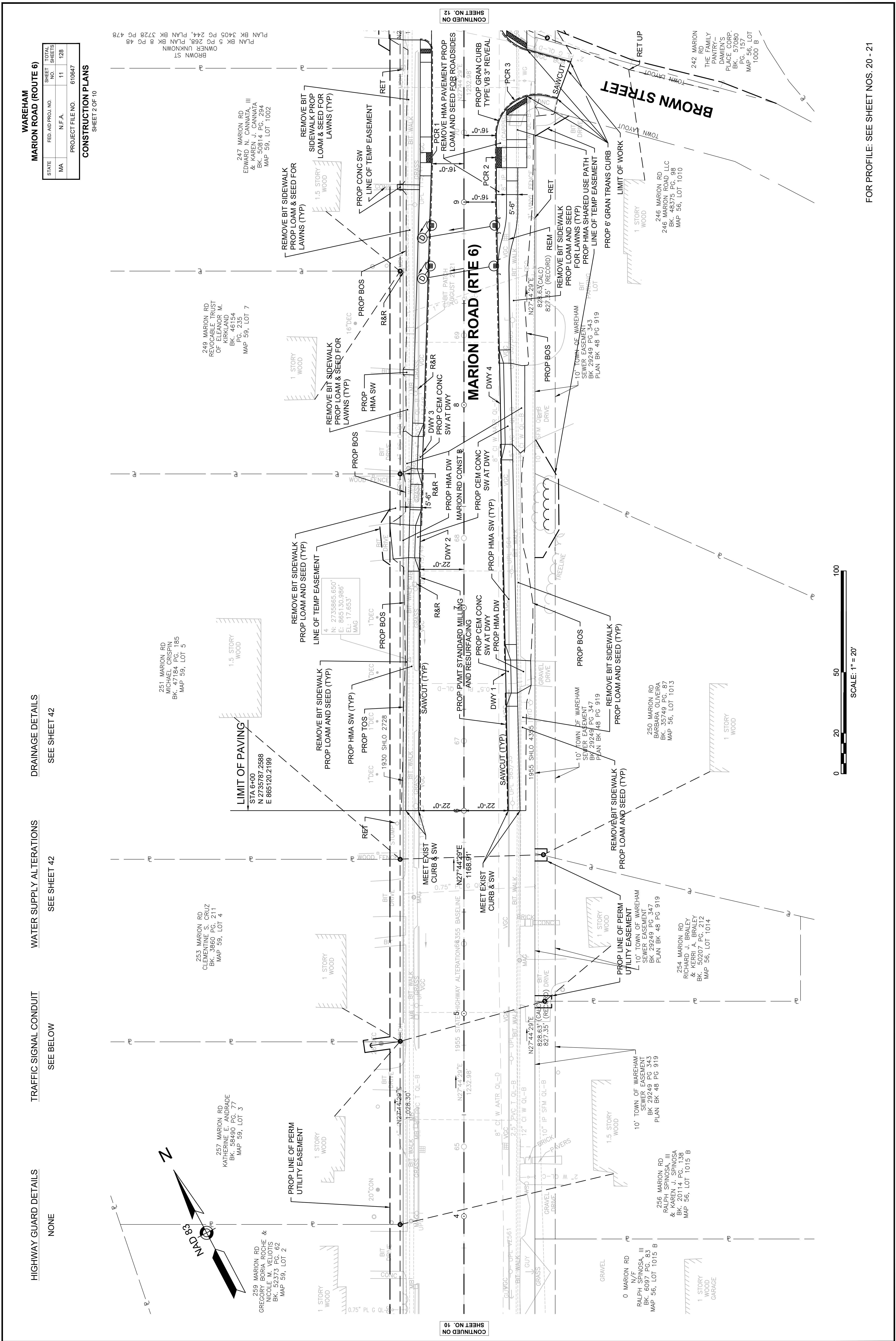
WAREHAM
MARION ROAD (ROUTE 6)

CONSTRUCTION PLANS

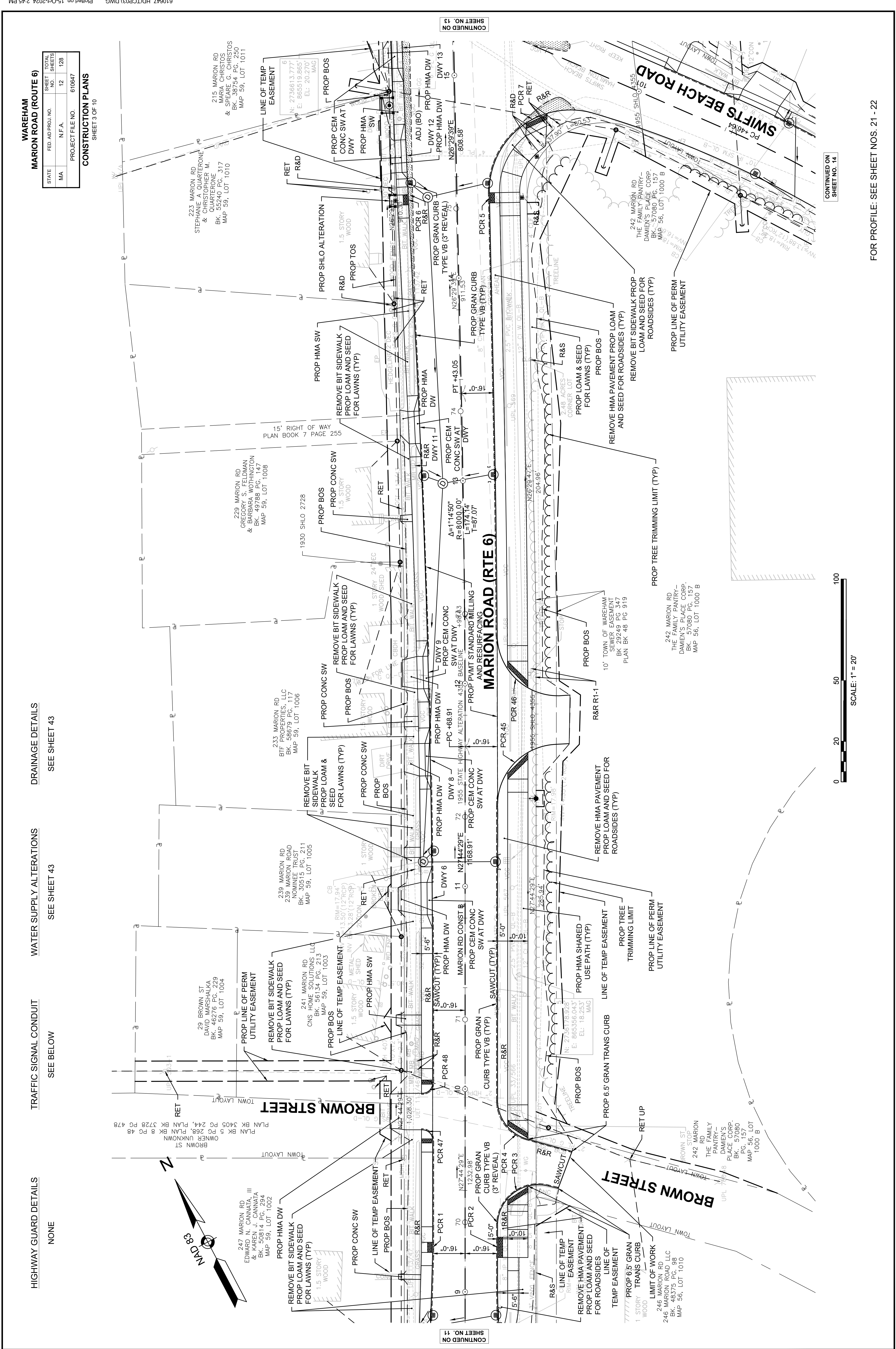
SHEET 1 OF 10



FOR PROFILE: SEE SHEET NOS. 20



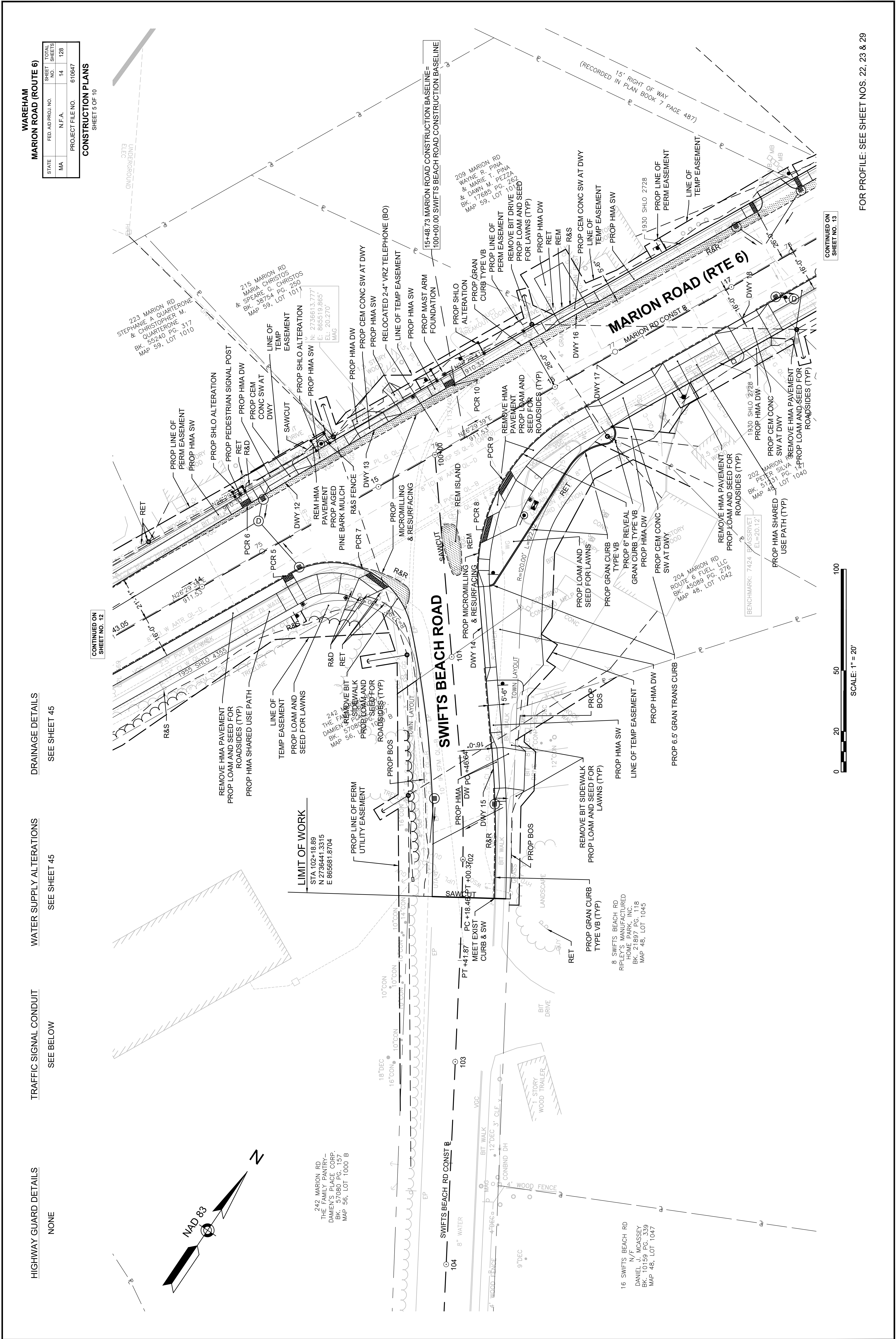
FOR PROFILE: SEE SHEET NOS. 20 - 21



HIGHWAY GUARD DETAILS	TRAFFIC SIGNAL CONDUIT	WATER SUPPLY ALTERATIONS	DRAINAGE DETAILS
NONE	SEE BELOW	SEESHEET 44	SEE SHEET 44



FOR PROFILE: SEE SHEET NOS. 22 - 23

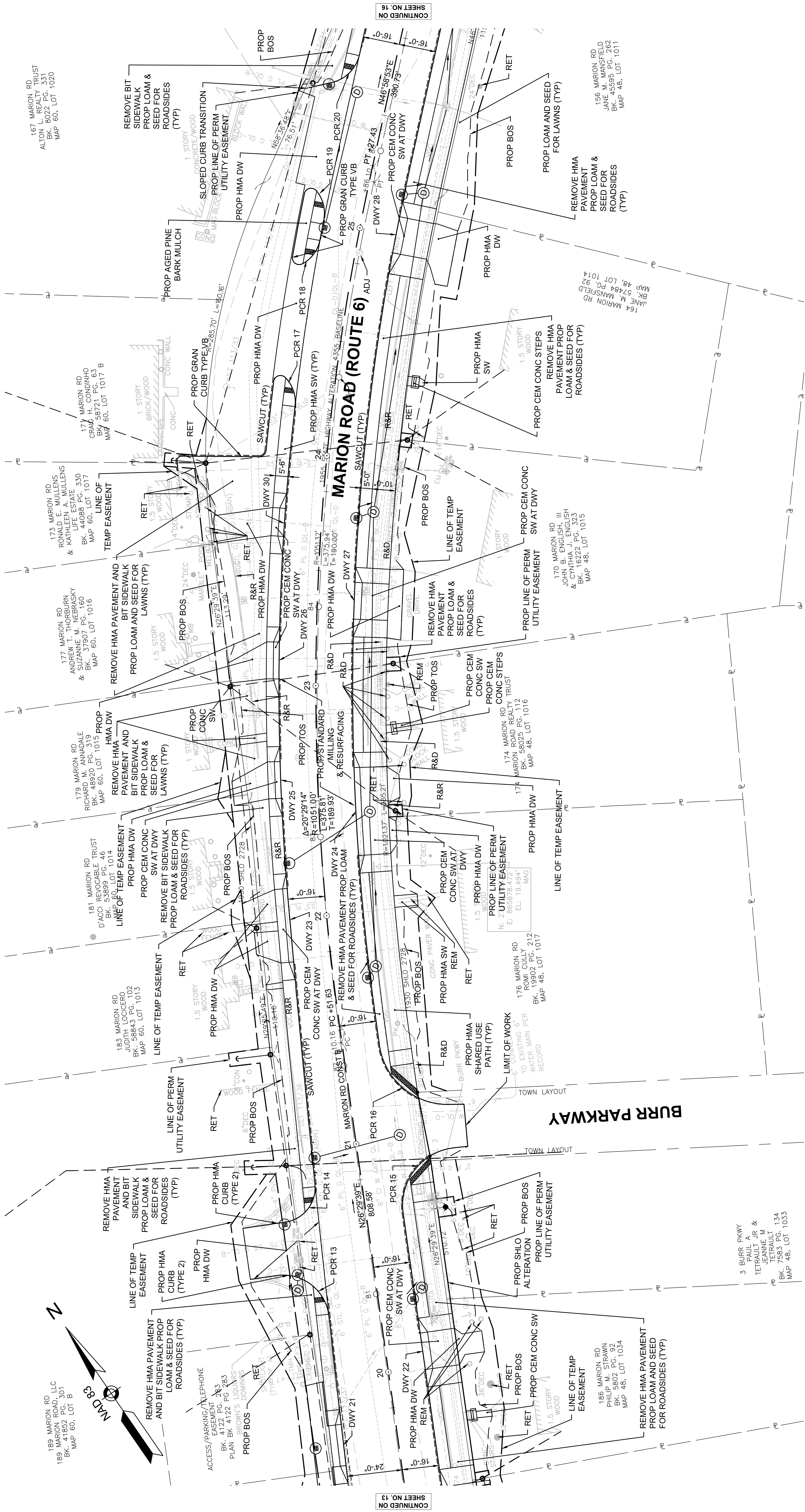


MARION ROAD (ROUTE 6)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	15	128
PROJECT FILE NO.			610647

CONSTRUCTION PLANS

SHEET 6 OF 10



Age Group	No answer	Don't know	Yes, definitely	Probably yes	Probably no
0-19	10	10	10	10	10
20-29	10	10	10	10	10
30-39	10	10	10	10	10
40-49	10	10	10	10	10
50-59	10	10	10	10	10
60-69	10	10	10	10	10
70-79	10	10	10	10	10
80-89	10	10	10	10	10
90-99	10	10	10	10	10

SCALE: 1" = 20'

FOR PROFILE: SEE SHEET NOS. 23 - 24

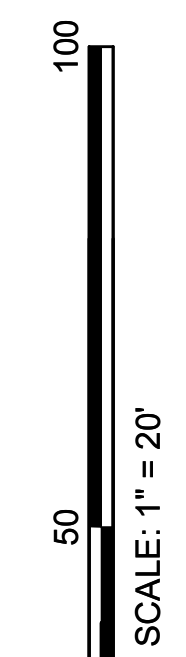
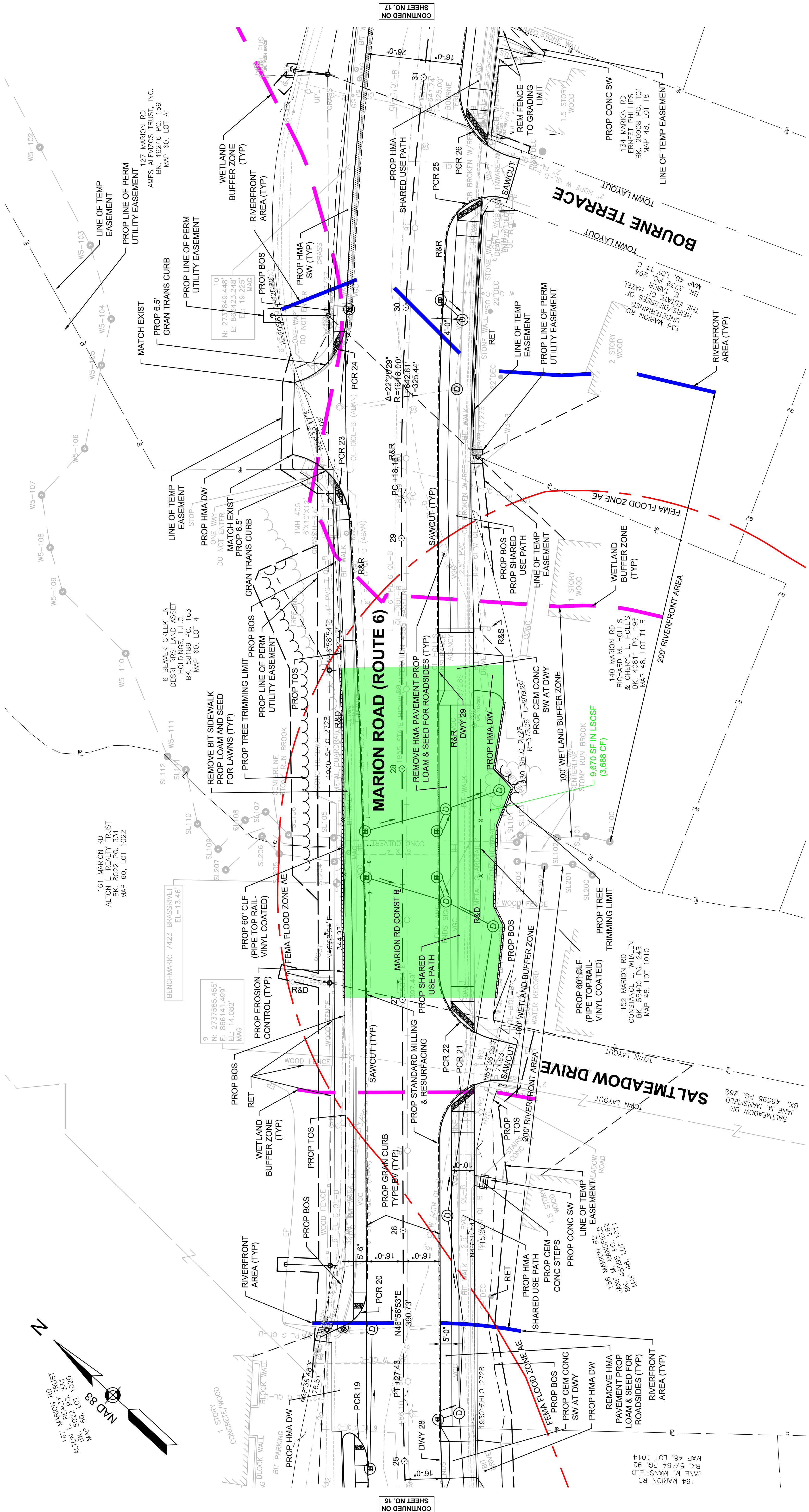
HIGHWAY GUARD DETAILS
NONE
TRAFFIC SIGNAL CONDUIT
SEE BELOW
WATER SUPPLY ALTERATIONS
SEE SHEET 47
DRAINAGE DETAILS
SEE SHEET 47

WAREHAM
MARION ROAD (ROUTE 6)

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	16	128

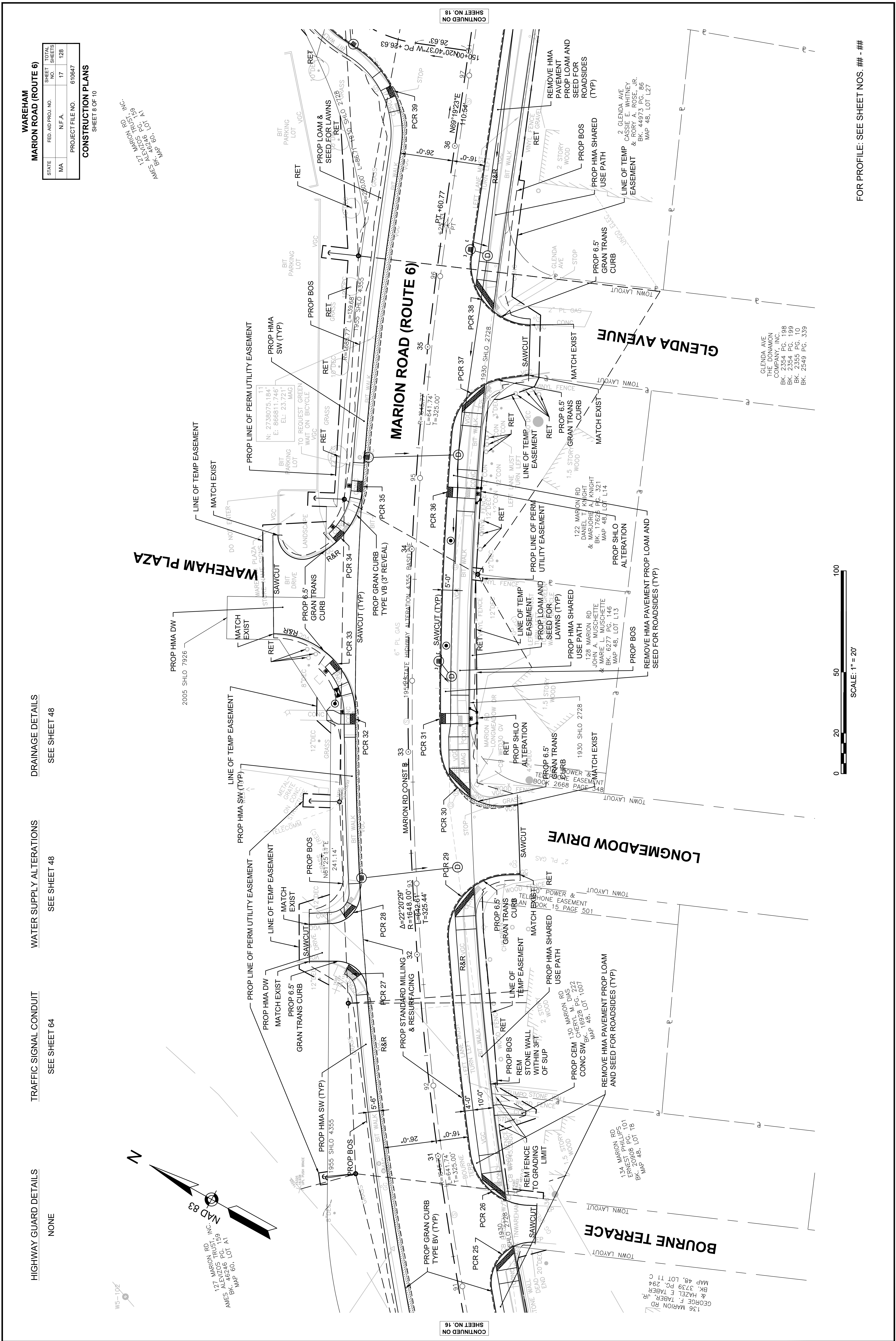
PROJECT FILE NO.	610647

CONSTRUCTION PLANS
SHEET 7 OF 10

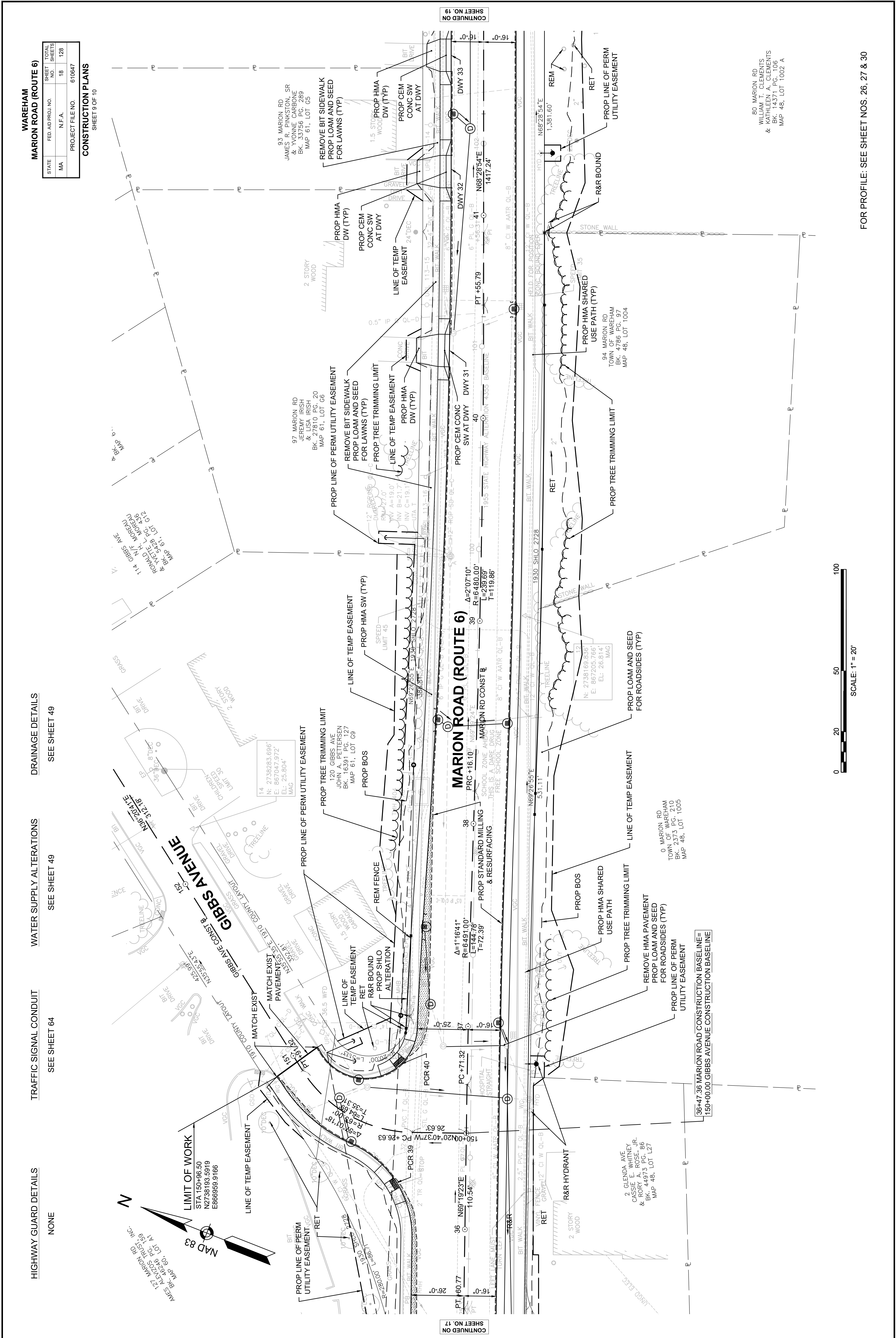


- LEGEND:
- WETLAND BUFFER ZONE
 - RIVERFRONT AREA
 - FEMA FLOOD ZONE AE

FOR PROFILE: SEE SHEET NOS. 24 - 25



FOR PROFILE: SEE SHEET NOS. ## - ##



FOR PROFILE: SEE SHEET NOS. 26, 27 & 30

HIGHWAY GUARD DETAILS

SEE SHEET 64

WATER SUPPLY ALTERATIONS

SEE SHEET 50

DRAINAGE DETAILS

SEE SHEET 50

CONSTRUCTION PLANS

SHEET 10 OF 10



FOR PROFILE: SEE SHEET NOS. 27 & 28

2

Appendix B
Stormwater Management Checklist and Regulatory Compliance



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the [Massachusetts Stormwater Handbook](#). The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.¹ This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8²
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

¹ The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

² For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature

Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

- ☐ New development
- ☒ Redevelopment
- ☐ Mix of New Development and Redevelopment



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- ☐ No disturbance to any Wetland Resource Areas
- ☐ Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- ☒ Reduced Impervious Area (Redevelopment Only)
- ☒ Minimizing disturbance to existing trees and shrubs
- ☐ LID Site Design Credit Requested:
 - ☐ Credit 1
 - ☐ Credit 2
 - ☐ Credit 3
- ☐ Use of "country drainage" versus curb and gutter conveyance and pipe
- ☐ Bioretention Cells (includes Rain Gardens)
- ☐ Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- ☐ Treebox Filter
- ☐ Water Quality Swale
- ☐ Grass Channel
- ☐ Green Roof
- ☐ Other (describe): _____

Standard 1: No New Untreated Discharges

- ☒ No new untreated discharges (No new stormwater conveyances. Existing outfalls will be maintained.)
- ☐ Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- ☐ Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation. Not Applicable, peak rate attenuating BMPs are not included as part of this safety improvement project.

- ☐ Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- ☐ Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- ☐ Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge. Not Applicable, recharge BMPs are not included as part of this safety improvement project.

- ☐ Soil Analysis provided.
- ☐ Required Recharge Volume calculation provided.
- ☐ Required Recharge volume reduced through use of the LID site Design Credits.
- ☐ Sizing the infiltration, BMPs is based on the following method: Check the method used.
 - ☐ Static
 - ☐ Simple Dynamic
 - ☐ Dynamic Field¹
- ☐ Runoff from all impervious areas at the site discharging to the infiltration BMP.
- ☐ Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- ☐ Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- ☐ Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
 - ☐ Site is comprised solely of C and D soils and/or bedrock at the land surface
 - ☐ M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
 - ☐ Solid Waste Landfill pursuant to 310 CMR 19.000
 - ☒ Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- ☐ Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- ☐ Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

¹ 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

- ☐ The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- ☐ Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality. Deep sump catch basins are proposed where new catch basins are needed. Existing structures and pipes within the project area will largely be maintained.

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
 - Provisions for storing materials and waste products inside or under cover;
 - Vehicle washing controls;
 - Requirements for routine inspections and maintenance of stormwater BMPs;
 - Spill prevention and response plans;
 - Provisions for maintenance of lawns, gardens, and other landscaped areas;
 - Requirements for storage and use of fertilizers, herbicides, and pesticides;
 - Pet waste management provisions;
 - Provisions for operation and management of septic systems;
 - Provisions for solid waste management;
 - Snow disposal and plowing plans relative to Wetland Resource Areas;
 - Winter Road Salt and/or Sand Use and Storage restrictions;
 - Street sweeping schedules;
 - Provisions for prevention of illicit discharges to the stormwater management system;
 - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
 - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
 - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- ☐ A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
 - ☐ Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
 - ☐ is within the Zone II or Interim Wellhead Protection Area
 - ☐ is near or to other critical areas
 - ☐ is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
 - ☐ involves runoff from land uses with higher potential pollutant loads.
 - ☐ The Required Water Quality Volume is reduced through use of the LID site Design Credits.
 - ☐ Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

- ☐ The BMP is sized (and calculations provided) based on:
 - ☐ The ½" or 1" Water Quality Volume or
 - ☐ The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- ☐ The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- ☐ A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs). Not Applicable, the project area does not qualify as a land use with higher potential pollutant loads.

- ☐ The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- ☐ The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted **prior to** the discharge of stormwater to the post-construction stormwater BMPs.
- ☐ The NPDES Multi-Sector General Permit does **not** cover the land use.
- ☐ LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- ☐ All exposure has been eliminated.
- ☐ All exposure has **not** been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- ☐ The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas. Not Applicable, the project site is not located within or in the vicinity of a critical area.

- ☐ The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- ☐ Critical areas and BMPs are identified in the Stormwater Report.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

- ☒ The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
 - ☒ Limited Project
 - ☐ Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
 - ☐ Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
 - ☐ Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
 - ☒ Bike Path and/or Foot Path
 - ☒ Redevelopment Project
 - ☐ Redevelopment portion of mix of new and redevelopment.
- ☐ Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- ☐ The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
 - Construction Period Operation and Maintenance Plan;
 - Names of Persons or Entity Responsible for Plan Compliance;
 - Construction Period Pollution Prevention Measures;
 - Erosion and Sedimentation Control Plan Drawings;
 - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
 - Vegetation Planning;
 - Site Development Plan;
 - Construction Sequencing Plan;
 - Sequencing of Erosion and Sedimentation Controls;
 - Operation and Maintenance of Erosion and Sedimentation Controls;
 - Inspection Schedule;
 - Maintenance Schedule;
 - Inspection and Maintenance Log Form.
- ☐ A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- ☐ The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- ☐ The project is **not** covered by a NPDES Construction General Permit.
- ☐ The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- ☒ The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan. MassDOT, as a Municipal Storm Sewer System (MS4) Operator, maintains their roadway network in accordance with their MS4 permit.

- ☐ The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
 - ☐ Name of the stormwater management system owners;
 - ☐ Party responsible for operation and maintenance;
 - ☐ Schedule for implementation of routine and non-routine maintenance tasks;
 - ☐ Plan showing the location of all stormwater BMPs maintenance access areas;
 - ☐ Description and delineation of public safety features;
 - ☐ Estimated operation and maintenance budget; and
 - ☐ Operation and Maintenance Log Form.
- ☐ The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
 - ☐ A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
 - ☐ A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

- ☐ The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- ☒ An Illicit Discharge Compliance Statement is attached; **included below, Regulatory Compliance**
- ☐ NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.

1.0 REGULATORY COMPLIANCE

The Project qualifies as a “limited project” under the Wetlands Protection Act Regulations (310 CMR 10.53(3)(f) and 310 CMR 10.24(7)(c)1) for maintenance and improvement of existing public roadways, including widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems. It is considered a re-development project, therefore in accordance with the Massachusetts Stormwater Management Standards, it is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5 and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable.

Standard 1: “No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.”

The project does not include any new stormwater conveyances. Existing outfalls will be maintained.

Standard 2: “Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates. This Standard may be waived for discharges to land subject to coastal storm flowage as defined in 310 CMR 10.04.”

Peak rate attenuating BMPs are not included as part of this safety improvement project. Impervious area will be decreased by 3.0% in the overall project area and will decrease by 6.8% within the 200-foot Riverfront Area.

Standard 3: “Loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures, including environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from the pre-development conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook.”

Recharge BMPs are not included as part of this safety improvement project. Impervious area will be decreased by 3.0% in the overall project area and will decrease by 6.8% within the 200-foot Riverfront Area.

Standard 4: “Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS). This standard is met when:

- a. Suitable practices for source control and pollution prevention are identified in a long-term pollution prevention plan and thereafter are implemented and maintained;**
- b. Structural stormwater BMPs are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook; and**
- c. Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook.”**

Deep sump catch basins are proposed where new catch basins are needed. Existing structures and pipes within the project area will largely be maintained.

Standard 5: “For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from land uses to the maximum extent practicable. If through source control and/or pollution prevention, all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt and stormwater runoff, the proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53, and the regulations promulgated thereunder at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.”

The project area does not qualify as a land use with higher potential pollutant loads.

Standard 6: “Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply and stormwater discharges near or at any other critical area require the use of the specific source control and pollution prevention measures and specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook. A discharge is near a critical area if there is a strong likelihood of a significant impact occurring to said area, taking into account site-specific factors. Stormwater discharges to Outstanding Resource Waters and Special Resource Waters shall be removed and set back from the receiving water or wetland and receive the highest and best practical method of treatment. A “stormwater discharge”, as defined in 314 CMR 3.04(2)(a)1 or (b), to an Outstanding Resource Water or Special Resource Water shall comply with 314 CMR 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A are prohibited unless essential to the operation of a public water supply”.

The project site is not located within a Zone II or Interim Wellhead Protection Area of a public water supply, nor is it located within or in the vicinity of any other critical area.

Standard 7: “A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.”

The project is a redevelopment project and will meet the Stormwater Management Standards to the maximum extent practicable. Deep sump catch basins are proposed for TSS removal where new catch basins are warranted due to realignment of the curb line.

Standard 8: “A plan to control construction-related impacts, including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) must be developed and implemented.”

The project’s Stormwater Pollution Prevention Plan will include erosion and sedimentation control plans and feature project specific temporary and permanent stabilization and sediment control practices in accordance with the EPA Construction General Permit requirements. Sedimentation control practices for this project include catch basin inlet protection and compost filter tubes. Erosion control practices will include stabilization of disturbed areas with temporary or permanent loam and seed or hydroseed.

Standard 9: “A long-term operation and maintenance plan shall be developed and implemented to ensure that stormwater management systems function as designed.”

MassDOT, as a Municipal Storm Sewer System (MS4) Operator, maintains their roadway network in accordance with their MS4 permit.

Standard 10: “All illicit discharges to the stormwater management system are prohibited.”

Illicit Discharge Compliance Statement: There are no known or proposed illicit discharges related to this Project. Should a previously unknown illicit discharge be discovered during construction, it will be referred to the Board of Health for sourcing and resolution through the Illicit Discharge Detection and Elimination (IDDE) program as part of the MS4 permit.

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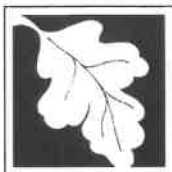
DOCUMENT A00861

MASSACHUSETTS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

ORDER OF CONDITIONS

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Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

SE076-2892

MassDEP File #

eDEP Transaction #

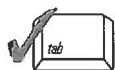
Wareham

City/Town

A. General Information

Please note:
 this form has
 been modified
 with added
 space to
 accommodate
 the Registry
 of Deeds
 Requirements

Important:
 When filling
 out forms on
 the
 computer,
 use only the
 tab key to
 move your
 cursor - do
 not use the
 return key.



1. From: Wareham
 Conservation Commission

2. This issuance is for
 (check one): a. ☒ Order of Conditions b. ☐ Amended Order of Conditions

3. To: Applicant:

Erica

a. First Name

Larner

b. Last Name

MassDOT Highway Division

c. Organization

10 Park Plaza, Room 7360

d. Mailing Address

Boston

e. City/Town

MA

f. State

02116

g. Zip Code

4. Property Owner (if different from applicant):

a. First Name

b. Last Name

c. Organization

d. Mailing Address

e. City/Town

f. State

g. Zip Code

5. Project Location:

Marion Rd (Route 6) & Swifts Beach Rd

a. Street Address

Wareham

b. City/Town

Roadway Right-of-Way

c. Assessors Map/Plat Number

Roadway Right-of-Way

d. Parcel/Lot Number

Latitude and Longitude, if known:

41d45m17.3874s

d. Latitude

70d43m57.3816s

e. Longitude



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A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):
Plymouth
 a. County 2457 b. Certificate Number (if registered land) 282
 c. Book 12/23/2024 d. Page 1/15/2025
 7. **Dates:** a. Date Notice of Intent Filed 12/23/2024 b. Date Public Hearing Closed 1/15/2025 c. Date of Issuance 1/27/2025
 8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):
Plan and Profile of Marion Rd (Route 6) in the Town of Wareham Plymouth County
 a. Plan Title Tetra Tech b. Prepared By Tetra Tech
 c. Signed and Stamped by 7/21/2023
 d. Final Revision Date 1" = 20'
 e. Scale
 f. Additional Plan or Document Title g. Date

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

- a. ☐ Public Water Supply b. ☐ Land Containing Shellfish c. ☒ Prevention of Pollution
 d. ☐ Private Water Supply e. ☐ Fisheries f. ☐ Protection of Wildlife Habitat
 g. ☒ Groundwater Supply h. ☐ Storm Damage Prevention i. ☒ Flood Control

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

- a. ☒ the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.



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B. Findings (cont.)

Denied because:

- b. ☐ the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**
- c. ☐ the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**
3. ☐ Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a) a. linear feet

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. ☐ Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. ☐ Bordering Vegetated Wetland	a. square feet	b. square feet	c. square feet	d. square feet
6. ☐ Land Under Waterbodies and Waterways	a. square feet	b. square feet	c. square feet	d. square feet
	e. c/y dredged	f. c/y dredged		
7. ☐ Bordering Land Subject to Flooding	a. square feet	b. square feet	c. square feet	d. square feet
Cubic Feet Flood Storage	e. cubic feet	f. cubic feet	g. cubic feet	h. cubic feet
8. ☐ Isolated Land Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
	1,320	1,320		
9. ☒ Riverfront Area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	g. square feet	h. square feet	i. square feet	j. square feet



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B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. ☐ Land Under the Ocean	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
12. ☐ Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. ☐ Coastal Beaches	a. square feet	b. square feet	c. nourishment cu yd	d. nourishment cu yd
14. ☐ Coastal Dunes	a. square feet	b. square feet	c. nourishment cu yd	d. nourishment cu yd
15. ☐ Coastal Banks	a. linear feet	b. linear feet		
16. ☐ Rocky Intertidal Shores	a. square feet	b. square feet		
17. ☐ Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18. ☐ Land Under Salt Ponds	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
19. ☐ Land Containing Shellfish	a. square feet	b. square feet	c. square feet	d. square feet
20. ☐ Fish Runs	Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	a. c/y dredged	b. c/y dredged		
21. ☒ Land Subject to Coastal Storm Flowage	9,670	9,670		
	a. square feet	b. square feet		
22. ☐ Riverfront Area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	g. square feet	h. square feet	i. square feet	j. square feet



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B. Findings (cont.)

* #23. If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c (BVW) or B.17.c (Salt Marsh) above, please enter the additional amount here.

23. ☐ Restoration/Enhancement *:

a. square feet of BVW

b. square feet of salt marsh

24. ☐ Stream Crossing(s):

a. number of new stream crossings

b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - a. The work is a maintenance dredging project as provided for in the Act; or
 - b. The time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
 - c. If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on 1/16/28 unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.



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C. General Conditions Under Massachusetts Wetlands Protection Act

8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
10. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]

"File Number SE076-2892 "
11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.
12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
13. The work shall conform to the plans and special conditions referenced in this order.
14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.



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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.
19. The work associated with this Order (the "Project")
 - (1) ☒ is subject to the Massachusetts Stormwater Standards
 - (2) ☐ is NOT subject to the Massachusetts Stormwater Standards

If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:

- a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.
- b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:
 - i. all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;
 - ii. as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;
 - iii. any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;



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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;

v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement") for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following:

i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and

ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 19(f) through 19(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 19(f) through 19(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.

f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.



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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- g) The responsible party shall:
1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
 2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
 3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.
- h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.
- i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.
- j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.
- k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.
- l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):

See attached document for additional conditions.

20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.



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D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? ☒ Yes ☐ No
2. The Wareham Conservation Commission hereby finds (check one that applies):
Conservation Commission
 - a. ☐ that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:
Wareham Wetland Protective By-Law Division VI Article I
 1. Municipal Ordinance or Bylaw
 2. Citation

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.
 - b. ☒ that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:
Wareham Wetland Protective By-Law Division VI Article I
 1. Municipal Ordinance or Bylaw
 2. Citation
3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.
The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):

See attached document for additional conditions.



Town of Wareham

54 Marion Road
Erica Larner

Staff Contacts

Joshua Faherty - JFaherty@wareham.ma.us

Christine Santos - CSantos@wareham.ma.us

Town of Wareham Conservation Commission

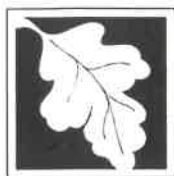
STANDARD CONDITIONS

1. To commence construction, written notification via email must be submitted to the Wareham Conservation Commission at least three (3) working days prior to the start date. Before this notification, all pre-construction requirements, including General Conditions 8 & 9, must be met.
2. Members, agents, and representatives of the Wareham Conservation Commission and the D.E.P. shall have the right to enter and inspect the property to ensure compliance with the conditions contained in this order, and shall notify the MassDOT Resident Engineer in advance before doing so. They may require the submission of any data necessary for such evaluation.
3. Construction should follow the plans submitted to the Commission and Mass D.E.P. If there are any proposed changes to the plans, the applicant must submit a new Notice of Intent or ask the Commission in writing whether the change is significant enough to require a new Notice. Failure to construct the project according to the approved site plan may lead to an Enforcement Order and/or fines of up to \$300.00 per day if the unauthorized deviations continue. This is a continuing requirement.
4. Before any earth-moving activity begins, a compost filter tube must be placed between the work area and the B.V.W. The compost filter tube should be securely anchored with stakes end-to-end. They must be inspected daily, and any destroyed or damaged sections must be replaced as necessary. The compost filter tube should remain in proper working condition until all disturbed areas have been stabilized.
5. Any construction in the flood plain shall conform to 780 CMR Section 2102.0 requirements for flood-resistant construction.
6. All final earth grading must be permanently stabilized by applying loam and seed or sod, except for the designated replication area and any designed paved area (e.g., driveway, sidewalk).

7. After finishing the project or before the Order of Conditions expires, the applicant must do one of the following: submit a Request for a Certificate of Compliance along with an "As-Built" Plan prepared by a professional engineer or land surveyor registered in Massachusetts. The plan should show any deviations from the original plans and demonstrate that the site has been developed according to the requirements of the Order of Conditions. Alternatively, the applicant can request an extension to the Order. Failing to comply with this condition may lead to the issuance of fines and/or other legal actions.
8. If the proposed project involves the construction of a replacement area, the replacement area must meet or exceed the general performance standards outlined in sections 10.55 (4) (b) 1-7 of the Wetlands Protection Act Regulations. If the replacement area does not meet any of these standards, the Commission may require measures necessary to achieve compliance.
9. The applicant must contact the Conservation Department to inspect the installed compost filter tube. This inspection must be done prior to commencing the project, which includes tree cutting or vegetation removal.
10. The applicant must schedule a preconstruction meeting with the project contractor, the Conservation Administrator, and the project Engineer to discuss the project schedule and details. This meeting must take place before the project begins, including any tree cutting or vegetation removal.
11. Only organic, slow-release nitrogen fertilizer should be used at the site according to the manufacturer's specifications. This requirement is a continuing condition.

SPECIAL CONDITIONS

1. A site visit shall be arranged within 30 days of issuance of this Order of Conditions.



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E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

Please indicate the number of members who will sign this form.

This Order must be signed by a majority of the Conservation Commission.

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

1/27/2025

1. Date of Issuance

4

2. Number of Signers

The Wareham Conservation Commission

Signature

SS Slavin

Sandra Slavin

Printed Name

Signature

Kwame & Bartie

Kwame Bartie

Printed Name

Signature

Denise Schulz

Printed Name

Signature

Michael Mercier

Printed Name

Signature

Jessica Parr

Printed Name

Signature

Autumn Wood

Printed Name

Signature

Paula Jean O'Neill

Printed Name

Signature

Printed Name

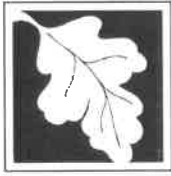
☒ by hand delivery on

☐ by certified mail, return receipt requested, on

1/27/2025

Date

Date



Massachusetts Department of Environmental Protection
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F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

SE076-2892

MassDEP File #

eDEP Transaction #

Wareham

City/Town

G. Recording Information

Prior to commencement of work, this Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

Conservation Commission

Please be advised that the Order of Conditions for the Project at:

Project Location

MassDEP File Number

Has been recorded at the Registry of Deeds of:

County

Book

Page

for:

Property Owner

and has been noted in the chain of title of the affected property in:

Book

Page

In accordance with the Order of Conditions issued on:

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

DEP File Number: _____

Request for Departmental Action Fee
Transmittal Form

Provided by DEP _____

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. Request Information

1. Location of Project

a. Street Address _____

b. City/Town, Zip _____

c. Check number _____

d. Fee amount _____

2. Person or party making request (if appropriate, name the citizen group's representative):

Name _____

Mailing Address _____

City/Town _____

State _____

Zip Code _____

Phone Number _____

Fax Number (if applicable) _____

3. Applicant (as shown on Determination of Applicability (Form 2), Order of Resource Area Delineation (Form 4B), Order of Conditions (Form 5), Restoration Order of Conditions (Form 5A), or Notice of Non-Significance (Form 6)):

Name _____

Mailing Address _____

City/Town _____

State _____

Zip Code _____

Phone Number _____

Fax Number (if applicable) _____

4. DEP File Number: _____

B. Instructions

1. When the Departmental action request is for (check one):

- ☐ Superseding Order of Conditions – Fee: \$120.00 (single family house projects) or \$245 (all other projects)
- ☐ Superseding Determination of Applicability – Fee: \$120
- ☐ Superseding Order of Resource Area Delineation – Fee: \$120

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.





Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

DEP File Number:

Request for Departmental Action Fee
Transmittal Form

Provided by DEP

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Instructions (cont.)

Send this form and check or money order, payable to the *Commonwealth of Massachusetts*, to:

Department of Environmental Protection
Box 4062
Boston, MA 02211

2. On a separate sheet attached to this form, state clearly and concisely the objections to the Determination or Order which is being appealed. To the extent that the Determination or Order is based on a municipal bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.
3. Send a **copy** of this form and a **copy** of the check or money order with the Request for a Superseding Determination or Order by certified mail or hand delivery to the appropriate DEP Regional Office (see <https://www.mass.gov/service-details/massdep-regional-offices-by-community>).
4. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

DOCUMENT A00863

THE COMMONWEALTH OF MASSACHUSETTS

OFFICE OF COASTAL ZONE MANAGEMENT (CZM)

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THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
100 Cambridge Street, Suite 900, Boston, MA 02114 • (617) 626-1200

November 27, 2023

Mr. Kevin Thompson
Environmental Analyst
MassDOT - Highway Division
10 Park Plaza
Boston, MA 02116

RE: Federal Consistency Certification: Corridor Improvements on Route 6 at Swifts Beach Road (610647); Wareham

Dear Mr. Thompson:

The Massachusetts Office of Coastal Zone Management (CZM) has completed its review of the proposed project which consists of roadway improvements on Marion Road (Route 6). These activities include the following:

- The project consists of a reduction of the number of lanes from four to two, the construction of a 10' shared use path, traffic signal improvements, full depth pavement construction, and drainage system construction.

Although the activities associated with this project are located within the defined Massachusetts Coastal Zone, they fall below the thresholds that CZM generally uses to require review under our federal consistency provisions. Consequently, a formal decision from this office regarding consistency with our enforceable program policies is not necessary. Any federal licenses or permits for the work performed may be subject to CZM's federal consistency review. It is incumbent upon the proponent to notify CZM, submit an explanation of the nature of the work under 15 CFR 930, and submit necessary data and information. CZM will use this information to determine if further federal consistency review is required.

Thank you for submitting the information to CZM. If you have any questions regarding our review process, feel free to contact me at sean.duffey@mass.gov.

Sincerely,

Sean Duffey
CZM Project Review and Dredging Coordinator

Cc: Sam Haines, CZM
Lisa Berry Engler, CZM



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DOCUMENT A00871

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE

NLAA CONCURRENCE VERIFICATION LETTER

(USFWS NLAA)

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104



In Reply Refer To:

February 01, 2023

Project code: 2023-0033887

Project Name: 610647 - WAREHAM- CORRIDOR IMPROVEMENTS ON ROUTE 6 AT SWIFTS BEACH ROAD

Subject: Concurrence verification letter for the '610647 - WAREHAM- CORRIDOR IMPROVEMENTS ON ROUTE 6 AT SWIFTS BEACH ROAD' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated February 01, 2023 to verify that the **610647 - WAREHAM- CORRIDOR IMPROVEMENTS ON ROUTE 6 AT SWIFTS BEACH ROAD** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*). Consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may

identify a small subset of actions having impacts that were unanticipated. In such instances, Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

NOTE: The Service reclassified the NLEB as an endangered species on November 30, 2022. This ruling becomes effective on January 30, 2023. This NLAA determination does not require reinitiation. For projects requiring consultation after the effective date of January 30, 2023, please use the 2022 FHWA, FRA, FTA PBO.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or Northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required. If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- Monarch Butterfly *Danaus plexippus* Candidate
- Plymouth Redbelly Turtle *Pseudemys rubriventris bangsi* Endangered
- Roseate Tern *Sterna dougallii dougallii* Endangered

Project Description

The following project name and description was collected in IPaC as part of the endangered species review process.

Name

610647 - WAREHAM- CORRIDOR IMPROVEMENTS ON ROUTE 6 AT SWIFTS BEACH ROAD

Description

610647 - WAREHAM- CORRIDOR IMPROVEMENTS ON ROUTE 6 AT SWIFTS BEACH ROAD

The intent of this project is to improve bicycle and pedestrian accommodation along this section of the Route 6 corridor as well as provide a left turn lane as the Route 6/Swifts Beach Road intersection. Work on this project consists of pavement milling/overlay, traffic signal upgrades and installation, reconstructed sidewalks, ADA compliant curb ramps and associated roadway geometry

Roseate Tern: After consulting with the Massachusetts Natural Heritage and Endangered Species Program (NHESP), it was determined that there is no data to suggest the presence of habitat and/or individuals at this project location

Plymouth Redbelly Turtle: After consulting with the Massachusetts Natural Heritage and Endangered Species Program (NHESP), it was determined that there is no data to suggest the presence of habitat and/or individuals at this project location

Monarch Butterfly: Candidate Species only, no conservation measures at this time.

Determination Key Result

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the threatened Northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

Qualification Interview

1. Is the project within the range of the Indiana bat^[1]?

[1] See [Indiana bat species profile](#)

Automatically answered

No

2. Is the project within the range of the Northern long-eared bat^[1]?

[1] See [Northern long-eared bat species profile](#)

Automatically answered

Yes

3. Which Federal Agency is the lead for the action?

A) *Federal Highway Administration (FHWA)*

4. Are *all* project activities limited to non-construction^[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

[1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces^[1]?

[1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum^[1]?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

7. Is the project located **within** a karst area?

No

8. Is there *any* suitable^[1] summer habitat for Indiana Bat or NLEB **within** the project action area^[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the [User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat](#).

Yes

9. Will the project remove *any* suitable summer habitat^[1] and/or remove/trim any existing trees **within** suitable summer habitat?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

Yes

10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

No

11. Have presence/probable absence (P/A) summer surveys^{[1][2]} been conducted^{[3][4]} **within** the suitable habitat located within your project action area?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

[3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

[4] Negative presence/probable absence survey results obtained using the [summer survey guidance](#) are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

Yes

SUBMITTED DOCUMENTS

- 610647_MassDOT_Wareham_NLEB Memo-Final.pdf <https://ipac.ecosphere.fws.gov/project/MZUN2ZRXMJAMVIE7NPLVMGRLCY/projectDocuments/121161802>

12. Did the presence/probable absence (P/A) summer surveys detect Indiana bats and/or NLEB^[1]?

[1] P/A summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate home range) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

No

13. Were the P/A summer surveys conducted **within** the fall swarming/spring emergence range of a documented Indiana bat hibernaculum^[1]?

[1] Contact the local Service Field Office for appropriate distance from hibernacula.

No

14. Does the project include activities **within documented NLEB habitat**^{[1][2]}?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

15. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

Yes

16. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

C) During both the active and inactive seasons

17. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

Yes

18. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

No

19. Are *all* trees that are being removed clearly demarcated?

Yes

20. Will the removal of habitat or the removal/trimming of trees involve the use of **temporary** lighting?

Yes

21. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

No

22. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

No

23. Does the project include slash pile burning?

No

24. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

No

25. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

No

26. Will the project involve the use of *any* **temporary** lighting in addition to the lighting already indicated for habitat removal (including the removal or trimming of trees), or bridge/structure removal, replacement or maintenance activities?

Yes

27. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting (other than the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities) will be used?

Yes

28. Will the project install new or replace existing **permanent** lighting?

No

29. Does the project include percussives or other activities (**not including tree removal/trimming or bridge/structure work**) that will increase noise levels above existing traffic/background levels?

Yes

30. Will the activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the active season^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates.

Yes

31. Will *any* activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the inactive season^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates.

Yes

32. Are *all* project activities that are **not associated with** habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

Yes

33. Will the project raise the road profile **above the tree canopy**?

No

34. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the active season within undocumented habitat.

35. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) and/or increase noise levels above existing traffic/background levels consistent with a No Effect determination in this key?

Automatically answered

Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the inactive season

36. Is the location of this project consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because no bats were detected during presence/probable absence surveys conducted during the summer survey season and outside of the fall swarming/spring emergence periods. Additionally, all activities were at least 0.5 miles from any hibernaculum.

37. **General AMM 1**

Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

Yes

Project Questionnaire

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

Yes

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

No

3. How many acres^[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

[1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

0.27

Avoidance And Minimization Measures (AMMs)

This determination key result includes the commitment to implement the following Avoidance and Minimization Measures (AMMs):

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on December 01, 2022. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's [February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects](#). The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPaC User Contact Information

Agency: Massachusetts Department of Transportation
Name: Julia Hoogeboom
Address: 10 Park Plaza
City: Boston
State: MA
Zip: 02116
Email: julia.a.hoogeboom@dot.state.ma.us
Phone: 8574452880

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DOCUMENT A00875

**POLICY DIRECTIVE P-22-001
AND
POLICY DIRECTIVE P-22-002**

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Number: P-22-001Date: 9/23/22

POLICY DIRECTIVE

Jonathan Gulliver (signature on original)

HIGHWAY ADMINISTRATOR

Off-Site Stockpiling of Soil from MassDOT Construction Projects

Purpose

The purpose of this Policy Directive is to formally establish a policy and procedures for managing and stockpiling soil generated and transported from MassDOT construction projects. This Policy Directive does not supersede any Federal, State, or Local regulations.

Date of Effect

This Policy Directive is effective immediately for all projects, including active construction projects.

For active construction projects and for other projects advertised prior to October 15, 2022, changes to the contract documents needed to implement the requirements of this Policy Directive will be considered on a case-by-case basis and shall be approved by the District Highway Director, as necessary.

For projects advertised on or after October 15, 2022, MassDOT will include the requirements and implementation procedures of this Policy Directive in the construction contract documents.

Policy Requirements

This policy is intended to prevent the off-site relocation of excavated soil generated from MassDOT projects to areas near residential receptors and to control potential fugitive dusts and/or contaminants. To that end, excavated soil may not be moved from the project site without knowledge of the content of the material. Knowledge may include visual field observations for presence of staining, odor, and/or debris, screening with a photoionization detector (PID), laboratory analysis, and/or site history. Pavement millings and other non-soil materials are not subject to the requirements of this Policy Directive.

Moving soil from a MassDOT project site to a temporary off-site storage location must be approved in writing by the District Highway Director.

The Contractor must select a storage location that is at least 500 feet away from residential receptors, as defined herein to include, but not be limited to, residential dwellings, residentially

zoned property, schools, daycare facilities, playgrounds, parks, recreational areas, hospitals, elderly housing and convalescent facilities.

Temporary off-site storage of excavated soil from a MassDOT project is only permissible at a location approved and permitted by MassDOT. The temporary storage location should be located within the same municipality where the soil was excavated, where possible. Stockpiled soil must be securely covered, and appropriate measures must be taken to minimize fugitive dust and erosion.

Signs indicating the source of the soil, the date the soil was generated, and contact information must be erected and maintained until the stockpiled soils are transported to a disposal facility or reused on the project site.

Implementation Procedures

To ensure that off-site storage of excavated soils is managed properly on MassDOT projects, this policy requires the following:

1. Off-Site Stockpile Storage Locations

- a. The Contractor shall provide proposed off-site storage locations to the Engineer for approval at least 30 days prior to transporting soil off site. Off-site storage locations should be in the same municipality as the work site.
- b. The Contractor shall keep excavated soil on site until adequately characterized to the satisfaction of the Engineer.
- c. The Contractor shall provide notification of the approved off-site storage location to the local Board of Health and the Town Manager's/Mayor's Office at least 7-days prior to transporting soil off site.
- d. The Contractor shall provide the Engineer with at least 3-days' notice prior to transporting soil off site.
- e. For off-site storage locations on MassDOT property, the Contractor is required to obtain an Access Permit through the District Permits Office prior to storage of soil or other materials. MassDOT will issue these permits at no cost to the Contractor. Information to be submitted by the Contractor as part of the permit application shall include:
 - i. A description of material to be stored off-site, including available analytical data;
 - ii. A figure of the location with distances to residences and residential receptors; and
 - iii. Anticipated duration of temporary storage.
- f. Stockpile locations should not be within 500 feet of residential receptors (e.g., residential dwellings, residentially zoned property, schools, daycare facilities, playgrounds, parks, recreational areas, hospitals, elderly housing and convalescent facilities).
 - i. If the stockpile location must be within 500 feet of residential receptors, then soil must be less than RCS-1 (per 310 CMR 40.1600) and free of potentially hazardous or regulated items.

- g. For off-site storage locations on non-MassDOT property, the Contractor must notify the property owner(s) at least 7 days prior to transporting material.
- h. Exceptions to these rules will be reviewed by MassDOT and may be approved by the District Highway Director on a case-by-case basis.

2. Off-Site Stockpile Management

- a. The Contractor shall keep soil stockpiles on impermeable surfaces (e.g., asphalt or concrete) or on 10-mil polyethylene sheeting.
- b. The Contractor shall cover soil stockpiles with 10-mil polyethylene sheeting and surround with a berm made of hay bales, straw wattles, or similar.
 - i. Piles that are actively being worked on must be covered and re-secured at the end of the work shift.
- c. The Contractor shall label stockpiles with signs, including:
 - i. Location of origin (including any Release Tracking Numbers)
 - ii. Stockpile ID number (including MassDOT District office-assigned tracking ID, if different)
 - iii. Date of initial accumulation
 - iv. Applicable telephone numbers for the Contractor and MassDOT.
- d. The Contractor shall mitigate fugitive dust at storage locations under the direction of an appropriately trained/certified environmental professional.
- e. The Contractor shall remedy noncompliance with this policy within 48 hours.
- f. The Contractor shall remedy noncompliance with this policy on the SAME DAY for potentially hazardous material, as determined by the Engineer.
- g. The Contractor shall handle excavated soil according to federal, state, and local regulations.
- h. The Contractor shall use appropriate shipping documents for all movements of excavated soil on public roadways (e.g., Bill of Lading, Material Shipping Record, Manifest, Asbestos Waste Shipment Record, etc.).

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Number: P-22-002Date: 9/23/22

POLICY DIRECTIVE

Jonathan Gulliver (signature on original)

HIGHWAY ADMINISTRATOR

Use of MassDOT Property for Staging and other Construction-Related Operations

Purpose

This Policy Directive is intended to address the use of MassDOT property by MassDOT Contractors for construction staging and other construction-related operations that are not specifically defined in the construction contract. Such use of MassDOT property will only be allowed if permitted by the District Office in accordance with 700 CMR 13.00, Approval of Access to MassDOT Highways and Other Property. This includes the use of MassDOT property for staging, laydown, and storage of equipment and materials, including soil excavated from a project site.

This Policy Directive requires the Contractor/applicant to obtain a Non-Vehicular Access Permit from MassDOT to use MassDOT property for these purposes.

This Policy Directive is effective immediately and applies to all MassDOT construction projects.

General Permit Considerations and Conditions

In addition to other normal MassDOT Access Permit procedures, MassDOT shall consider the following during the application, review, implementation and monitoring processes of Access Permits required by this Policy Directive:

- Storage and placement of the Contractor's equipment and materials should not be allowed within the clear zone of the roadway.
- Stockpiled soils should not be located within 500 feet of residential receptors, as defined herein to include, but not be limited to, residential dwellings, residentially zoned property, schools, daycare facilities, playgrounds, parks, recreational areas, hospitals, elderly housing and convalescent facilities.
- The Contractor/applicant shall identify the access/egress locations of the proposed storage areas. MassDOT will only approve locations determined to be safe for roadway users, construction workers and the general public.
- The Contractor may be required to submit a Traffic Management Plan and/or Lighting Plan for MassDOT review and approval as part of the permit application, depending on the proposed use of the area.

- The Contractor shall submit the permit application through MassDOT's online State Highway Access Permit System (SHAPS).
- MassDOT will waive the permit application fee for any application received from a MassDOT Contractor for any permit required by this Policy Directive and will waive any subsequent amendment and extension fees that may otherwise be required.
- MassDOT will review the permit application in accordance with applicable standard procedures and will apply standard permit terms and conditions, as necessary.
- The Resident Engineer will verify that the permit is approved before allowing the Contractor to use the affected area for the requested purpose.
- Areas permitted are for use by the approved applicant only and are not to be shared with or used by other vendors. Subcontractors specifically engaged with the applicant working on the specific MassDOT project will be allowed to use the area in accordance with the terms of the permit.
- Permits are issued on an annual basis and will require the Contractor to file for an extension each year to continue use.

Exemptions from Permit Requirements

Equipment and materials being used for active construction operations and located within the work zone of the construction contract are exempt from this permit requirement, provided they do not interfere with the safety or operation of the roadway or the work zone. Examples of these types of exempt uses are:

- Equipment and materials parked or stored within a protected (barriered) work zone.
- Materials placed in the work zone prior to same-day installation or use.
- Soils excavated temporarily and scheduled to be replaced, such as for trenching operations or for installation of drainage structures.

DOCUMENT B00420

PROPOSAL

WAREHAMFor: **FAP No. STP-0035(068)X Corridor Improvements on Route 6 at Swifts Beach Road**

COMMONWEALTH OF MASSACHUSETTS

LOCATION

The work referred to herein is in the Town of WAREHAM in Plymouth County, in the Commonwealth of Massachusetts, and is shown by the locus map (Document 00331) in the Proposal Pamphlet, the work locations extend as follows:

Route 6**Beginning – Station 3+00.00 +/-****Ending –Station 45+00.00 +/-**

The contract prices shall include the furnishing of all materials (except as otherwise herein specified), the performing of all the labor requisite or proper, the providing of all necessary machinery, tools, apparatus and other means of construction, the doing of all the abovementioned work in the manner set forth, described and shown in the specifications and on the drawings for the work, and in the form of contract, and the completion thereof within **1836 CALENDAR DAYS** upon receipt of a Notice to Proceed, except that if the completion date falls between December 1 and March 15 then the same number of days beyond December 1st will be extended after March 15th.

The Work of this project is described by the following Items and quantities.

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Project # 610647		Contract # 133932		
Location : WAREHAM				
Description : Corridor Improvements on Route 6 at Swifts Beach Road				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
101.	1	CLEARING AND GRUBBING AT _____ PER ACRE		
102.001	5	TREE TRIMMING CREW AT _____ PER DAY		
102.1	1,300	TREE TRIMMING AT _____ PER FOOT		
102.2	1	TREE TRIMMING AT _____ LUMP SUM		
102.511	10	TREE PROTECTION - ARMORING AND PRUNING AT _____ EACH		
102.513	500	TREE PROTECTION - AIR EXCAVATION AND ROOT PRUNING AT _____ PER SQUARE FOOT		
102.521	300	TREE AND PLANT PROTECTION FENCE AT _____ PER FOOT		
102.533	2,100	TREE CARE - WATERING AT _____ PER GALLON		
102.55	40	ARBORIST AT _____ PER HOUR		

Project # 610647		Contract # 133932		
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
103.	4	TREE REMOVED - DIAMETER UNDER 24 INCHES AT _____ EACH		
104.	5	TREE REMOVED - DIAMETER 24 INCHES AND OVER AT _____ EACH		
105.	2	STUMP REMOVED AT _____ EACH		
120.1	3,810	UNCLASSIFIED EXCAVATION AT _____ PER CUBIC YARD		
141.1	45	TEST PIT FOR EXPLORATION AT _____ PER CUBIC YARD		
142.	670	CLASS B TRENCH EXCAVATION AT _____ PER CUBIC YARD		
144.	80	CLASS B ROCK EXCAVATION AT _____ PER CUBIC YARD		
146.	26	DRAINAGE STRUCTURE REMOVED AT _____ EACH		
146.1	2	DRAINAGE STRUCTURE REMOVED AT CULVERT AT _____ EACH		

Project # 610647		Contract # 133932		
Location : WAREHAM				
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
151.	2,500	GRAVEL BORROW AT _____ PER CUBIC YARD		
151.2	890	GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES AT _____ PER CUBIC YARD		
154.	5	SAND BORROW AT _____ PER CUBIC YARD		
156.	30	CRUSHED STONE AT _____ PER TON		
170.	9,000	FINE GRADING AND COMPACTING - SUBGRADE AREA AT _____ PER SQUARE YARD		
180.01	1	ENVIRONMENTAL HEALTH AND SAFETY PROGRAM AT _____ LUMP SUM		
180.02	100	PERSONAL PROTECTION LEVEL C UPGRADE AT _____ PER HOUR		
180.03	140	LICENSED SITE PROFESSIONAL SERVICES AT _____ PER HOUR		
181.11	550	DISPOSAL OF UNREGULATED SOIL AT _____ PER TON		

Project # 610647		Contract # 133932		
Location : WAREHAM				
Description : Corridor Improvements on Route 6 at Swifts Beach Road				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
181.12	100	DISPOSAL OF REGULATED SOIL - IN-STATE FACILITY AT _____ PER TON		
181.13	50	DISPOSAL OF REGULATED SOIL - OUT-OF-STATE FACILITY AT _____ PER TON		
181.14	50	DISPOSAL OF HAZARDOUS WASTE AT _____ PER TON		
182.1	1	INSPECTION AND TESTING FOR ASBESTOS AT _____ LUMP SUM		
182.2	700	REMOVAL OF ASBESTOS AT _____ PER FOOT		
183.1	58,000	TREATMENT OF CONTAMINATED GROUNDWATER AT _____ PER GALLON		
183.2	9,800	DISPOSAL OF GRANULAR ACTIVATED CARBON AT _____ PER POUND		
201.	60	CATCH BASIN AT _____ EACH		
202.	33	MANHOLE AT _____ EACH		

Project # 610647		Contract # 133932		
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
202.2	2	MANHOLE (9 TO 14 FOOT DEPTH) AT _____ EACH		
205.	1	LEACHING BASIN AT _____ EACH		
220.	100	DRAINAGE STRUCTURE ADJUSTED AT _____ EACH		
220.2	20	DRAINAGE STRUCTURE REBUILT AT _____ PER FOOT		
220.3	8	DRAINAGE STRUCTURE CHANGE IN TYPE AT _____ EACH		
220.5	3	DRAINAGE STRUCTURE REMODELED AT _____ EACH		
220.6	25	SANITARY STRUCTURE REBUILT AT _____ PER FOOT		
220.7	13	SANITARY STRUCTURE ADJUSTED AT _____ EACH		
221.	38	FRAME AND COVER AT _____ EACH		

Project # 610647		Contract # 133932		
Location : WAREHAM				
Description : Corridor Improvements on Route 6 at Swifts Beach Road				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
222.1	49	FRAME AND GRATE - MASSDOT CASCADE TYPE AT _____ EACH		
223.2	39	FRAME AND GRATE (OR COVER) REMOVED AND DISCARDED AT _____ EACH		
227.3	55	REMOVAL OF DRAINAGE STRUCTURE SEDIMENT AT _____ PER CUBIC YARD		
227.31	2,700	REMOVAL OF DRAINAGE PIPE SEDIMENT AT _____ PER FOOT		
227.4	60	MASONRY PLUG AT _____ PER SQUARE FOOT		
238.10	50	10 INCH DUCTILE IRON PIPE AT _____ PER FOOT		
238.12	150	12 INCH DUCTILE IRON PIPE AT _____ PER FOOT		
241.12	2,650	12 INCH REINFORCED CONCRETE PIPE CLASS III AT _____ PER FOOT		
241.15	400	15 INCH REINFORCED CONCRETE PIPE CLASS III AT _____ PER FOOT		

Project # 610647		Contract # 133932		
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
243.12	100	12 INCH REINFORCED CONCRETE PIPE CLASS IV AT _____ PER FOOT		
271.121	500	12 INCH PIPE REMOVED AND DISCARDED AT _____ PER FOOT		
303.06	50	6 INCH DUCTILE IRON WATER PIPE (MECHANICAL JOINT) AT _____ PER FOOT		
309.	600	DUCTILE IRON FITTINGS FOR WATER PIPE AT _____ PER POUND		
347.1	100	1 INCH COPPER TUBING TYPE K AT _____ PER FOOT		
350.06	2	6 INCH GATE AND GATE BOX AT _____ EACH		
357.04	1	4 INCH GATE BOX AT _____ EACH		
357.06	1	6 INCH GATE BOX AT _____ EACH		
357.08	1	8 INCH GATE BOX AT _____ EACH		

Project # 610647		Contract # 133932		
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
357.10	1	10 INCH GATE BOX AT _____ EACH		
357.12	3	12 INCH GATE BOX AT _____ EACH		
358.	20	GATE BOX ADJUSTED AT _____ EACH		
367.08	14	8 INCH CAST IRON PLUG AT _____ EACH		
370.4	2	12 X 6 INCH TAPPING SLEEVE, VALVE AND BOX AT _____ EACH		
376.2	5	HYDRANT - REMOVED AND RESET AT _____ EACH		
376.5	1	HYDRANT - ADJUSTED AT _____ EACH		
381.01	3	SERVICE BOX (MUNICIPAL STANDARD) AT _____ EACH		
381.3	5	SERVICE BOX ADJUSTED AT _____ EACH		

Project # 610647		Contract # 133932		
Location : WAREHAM				
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
390.	3	LAWN IRRIGATION SYSTEM REMOVED AND RESET AT _____ EACH		
402.	15	DENSE GRADED CRUSHED STONE FOR SUB-BASE AT _____ PER CUBIC YARD		
415.1	17,300	PAVEMENT STANDARD MILLING AT _____ PER SQUARE YARD		
431.	650	HIGH EARLY STRENGTH CEMENT CONCRETE BASE COURSE AT _____ PER SQUARE YARD		
440.	20	CALCIUM CHLORIDE FOR ROADWAY DUST CONTROL AT _____ PER POUND		
443.	2	WATER FOR ROADWAY DUST CONTROL AT _____ PER 1000 GALLONS		
450.23	1,800	SUPERPAVE SURFACE COURSE - 12.5 (SSC - 12.5) AT _____ PER TON		
450.32	2,300	SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC - 19.0) AT _____ PER TON		
450.42	30	SUPERPAVE BASE COURSE - 37.5 (SBC - 37.5) AT _____ PER TON		

Project # 610647		Contract # 133932		
Location : WAREHAM				
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
451.	710	HMA FOR PATCHING AT _____ PER TON		
452.	3,500	ASPHALT EMULSION FOR TACK COAT AT _____ PER GALLON		
453.	9,000	HMA JOINT ADHESIVE AT _____ PER FOOT		
472.	570	TEMPORARY ASPHALT PATCHING AT _____ PER TON		
482.5	5,000	SAWCUTTING ASPHALT PAVEMENT FOR BOX WIDENING AT _____ PER FOOT		
506.	830	GRANITE CURB TYPE VB - STRAIGHT AT _____ PER FOOT		
506.1	700	GRANITE CURB TYPE VB - CURVED AT _____ PER FOOT		
509.	750	GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS - STRAIGHT AT _____ PER FOOT		
509.1	500	GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS - CURVED AT _____ PER FOOT		

Project # 610647		Contract # 133932		
Location : WAREHAM				
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
514.	13	GRANITE CURB INLET - STRAIGHT AT _____ EACH		
570.2	90	HOT MIX ASPHALT CURB TYPE 2 AT _____ PER FOOT		
580.	4,400	CURB REMOVED AND RESET AT _____ PER FOOT		
581.	17	CURB INLET REMOVED AND RESET AT _____ EACH		
594.	1,450	CURB REMOVED AND DISCARDED AT _____ PER FOOT		
597.	60	EDGING REMOVED AND DISCARDED AT _____ PER FOOT		
630.2	150	HIGHWAY GUARD REMOVED AND DISCARDED AT _____ PER FOOT		
645.160	120	60 INCH CHAIN LINK FENCE (PIPE TOP RAIL) VINYL COATED (LINE POST OPTION) AT _____ PER FOOT		
665.	250	CHAIN LINK FENCE REMOVED AND STACKED AT _____ PER FOOT		

Project # 610647		Contract # 133932		
Location : WAREHAM				
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
669.	50	FENCE REMOVED AND STACKED AT _____ PER FOOT		
697.1	50	SILT SACK AT _____ EACH		
701.	60	CEMENT CONCRETE SIDEWALK AT _____ PER SQUARE YARD		
701.1	1,160	CEMENT CONCRETE SIDEWALK AT DRIVEWAYS AT _____ PER SQUARE YARD		
701.2	890	CEMENT CONCRETE PEDESTRIAN CURB RAMP AT _____ PER SQUARE YARD		
702.	1,300	HOT MIX ASPHALT SIDEWALK OR DRIVEWAY AT _____ PER TON		
706.	10	BRICK WALK AT _____ PER SQUARE YARD		
710.4	29	BOUND - PLAIN GRANITE AT _____ EACH		
711.	4	BOUND REMOVED AND RESET AT _____ EACH		

Project # 610647		Contract # 133932		
Location : WAREHAM				
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
715.	9	RURAL MAIL BOX REMOVED AND RESET AT _____ EACH		
722.3	1	SCHEDULE OF OPERATIONS (TYPE C) - FIXED PRICE \$58500 AT Fifty Eight Thousand Five Hundred Dollars LUMP SUM	\$58,500.00	\$58,500.00
740.	61	ENGINEER'S FIELD OFFICE AND EQUIPMENT (TYPE A) AT _____ PER MONTH		
748.	1	MOBILIZATION AT _____ LUMP SUM		
751.	140	LOAM FOR ROADSIDES AT _____ PER CUBIC YARD		
751.1	500	LOAM FOR LAWNS AT _____ PER CUBIC YARD		
756.	1	NPDES STORMWATER POLLUTION PREVENTION PLAN AT _____ LUMP SUM		
765.	5,500	SEEDING AT _____ PER SQUARE YARD		
767.121	100	SEDIMENT CONTROL BARRIER AT _____ PER FOOT		

Project # 610647		Contract # 133932		
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
767.6	10	AGED PINE BARK MULCH AT _____ PER CUBIC YARD		
802.42	250	4 INCH TELEPHONE CONDUIT - TYPE NM (2 BANK) AT _____ PER FOOT		
802.420	450	4 INCH TELEPHONE CONDUIT - TYPE NM (20 BANK) AT _____ PER FOOT		
804.3	1,200	3 INCH ELECTRICAL CONDUIT TYPE NM - PLASTIC -(UL) AT _____ PER FOOT		
810.42	1	TELECOMMUNICATION MANHOLE AT _____ EACH		
811.202	1	ELECTRIC HANDHOLE AT _____ EACH		
811.22	6	ELECTRIC HANDHOLE - SD2.022 AT _____ EACH		
811.31	8	PULL BOX 12 X 12 INCHES - SD2.031 AT _____ EACH		
815.1	1	TRAFFIC CONTROL SIGNAL LOCATION NO. 1 AT _____ LUMP SUM		

Project # 610647		Contract # 133932		
Location : WAREHAM				
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
816.02	1	TRAFFIC SIGNAL RECONSTRUCTION LOCATION NO. 2 AT _____ LUMP SUM		
825.2	1	RRFB (2-POST ASSEMBLY SYSTEM) AT _____ EACH		
826.70	2	ELECTRIC SERVICE RISER RELOCATION AT _____ EACH		
831.	55	ROADSIDE GUIDE SIGN (D6/D8) - ALUMINUM PANEL (TYPE A) AT _____ PER SQUARE FOOT		
832.	200	WARNING-REGULATORY AND ROUTE MARKER - ALUMINUM PANEL (TYPE A) AT _____ PER SQUARE FOOT		
841.2	2	SUPPORTS FOR GUIDE SIGN (D6-5 INCH TUBULAR POST) STEEL AT _____ EACH		
847.1	20	SIGN SUP (N/GUIDE)+RTE MKR W/1 BRKWAY POST ASSEMBLY - STEEL AT _____ EACH		
850.41	1,000	ROADWAY FLAGGER AT _____ PER HOUR		
851.1	560	TRAFFIC CONES FOR TRAFFIC MANAGEMENT AT _____ PER DAY		

Project # 610647		Contract # 133932		
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Description : Corridor Improvements on Route 6 at Swifts Beach Road				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
852.	550	SAFETY SIGNING FOR TRAFFIC MANAGEMENT AT _____ PER SQUARE FOOT		
852.11	1,400	TEMPORARY PEDESTRIAN BARRICADE AT _____ PER FOOT		
852.12	4	TEMPORARY PEDESTRIAN CURB RAMP AT _____ EACH		
853.1	12	PORTABLE BREAKAWAY BARRICADE TYPE III AT _____ EACH		
853.403	140	TRUCK MOUNTED ATTENUATOR AT _____ PER DAY		
853.8	140	TEMPORARY ILLUMINATION FOR WORK ZONE AT _____ PER DAY		
854.016	63,300	TEMPORARY PAVING MARKINGS - 6 INCH (PAINTED) AT _____ PER FOOT		
854.036	400	TEMPORARY PAVING MARKINGS - 6 INCH (TAPE) AT _____ PER FOOT		
854.1	8,500	PAVEMENT MARKING REMOVAL AT _____ PER SQUARE FOOT		

Project # 610647		Contract # 133932		
Location : WAREHAM				
Description : Corridor Improvements on Route 6 at Swifts Beach Road				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
856.	1,120	ARROW BOARD AT _____ PER DAY		
856.12	100	PORTABLE CHANGEABLE MESSAGE SIGN AT _____ PER DAY		
859.	47,400	REFLECTORIZED DRUM AT _____ PER DAY		
859.1	960	REFLECTORIZED DRUMS WITH SEQUENTIAL FLASHING WARNING LIGHTS AT _____ PER DAY		
864.04	300	PAVEMENT ARROWS AND LEGENDS REFLECTORIZED WHITE (THERMOPLASTIC) AT _____ PER SQUARE FOOT		
866.106	7,600	6 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC) AT _____ PER FOOT		
866.112	5,500	12 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC) AT _____ PER FOOT		
867.104	2,500	4 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC) AT _____ PER FOOT		
867.106	10,000	6 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC) AT _____ PER FOOT		

Project # 610647		Contract # 133932		
Location : WAREHAM				
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ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
867.112	500	12 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC) AT _____ PER FOOT		
874.	39	STREET NAME SIGN AT _____ EACH		
874.2	14	TRAFFIC SIGN REMOVED AND RESET AT _____ EACH		
874.21	1	FLASHING SCHOOL ZONE TRAFFIC SIGN REMOVED AND RESET AT _____ EACH		
874.41	19	TRAFFIC SIGN REMOVED AND DISCARDED AT _____ EACH		
874.7	2	MISCELLANEOUS SIGNS REMOVED AND STACKED AT _____ EACH		
903.	5	3000 PSI, 1.5 INCH, 470 CEMENT CONCRETE AT _____ PER CUBIC YARD		
904.	10	4000 PSI, 3/4 INCH, 610 CEMENT CONCRETE AT _____ PER CUBIC YARD		
Total Qty:		313,063		